CURRICULUM VITAE

Name : R. Rajesh Babu

Sex : Male, Single
Date of Birth : 15th April, 1981
Nationality : Indian
Email ID : rbabu06@gmail.com
adore_rajesh@yahoo.com
Tel : +91-9933106426 (West Bengal)
: +91-9894286759 (Tamil Nadu)

Present Address : Research scholar, Rubber Technology Centre,
Indian Institute of Technology, Kharagpur-721302
West Bengal, India

Permanent Address : 1/4654/13, RVR Nagar, Mallanginar Road,
Near SFS church, Virudhunagar-626001, Virdhunagar Dist,
Tamil Nadu, India

Objective

To work in an environment where my potential can be utilized to the maximum for the development of the organization and which enrich my knowledge. To secure a position that will lead to a lasting working relationship in the field of polymer science and technology.

Area of Research Interest

Polymer blends and alloys, Thermoplastic elastomers, Polymer composites, Polymer-Filler reinforcement, Statistical analysis techniques in research methodology.

Academic Qualification

2006-Till date : Pursuing Ph.D. (Thesis submitted in January 2010)
Institute : Indian Institute of Technology, Kharagpur, West Bengal, India
Area of research : **Thermoplastic Elastomers by Dynamic Vulcanization Process**
-Preparation and characterization of thermoplastic vulcanizates based on polypropylene and ethylene octene copolymer blends

1998-2002	**:**	**Bachelor of Technology (B.Tech)**
Institute	:	Kamaraj college of Engineering and Technology, Tamil Nadu, India
Stream	:	Polymer Technology
Aggregate	:	**80.14 % (University 7th Rank)**
1997-1998	**:**	**Higher Secondary Class (12th grade)**
School	:	K.V.S. Higher Secondary School, Virudhunagar, Tamil Nadu, India
Aggregate	:	**89.75 %**
1995-1996	**:**	**Secondary Schooling (SSLC or 10th grade)**
School	:	K.V.S. Higher Secondary School, Virudhunagar, Tamil Nadu
Aggregate	:	**82.60 % (Gold Medal Endowment**)

Industrial Experience

2002–2006	**:**	**BASANT RUBBER FACTORY LTD.,** Mumbai, India
Position	:	Lab Superintendent (2002-2005) Assistant Manager (2005-2006)
Company profile	:	www.basantrubber.net

Job responsibilities

- Responsible for quality assurance and new product development
- Involved in ISO audit preparation activities.
- Analyze the non-conformity data for improvement in coordination with respective functions.
- Studying and improving the system to ensure effective utilization of machines and equipments.

Training

- Successfully completed "Internal Quality Auditor" training course in compliance with ISO 9001:2000, conducted by TQMI, India.
- Successfully completed "ISO 9001:2000 Lead Auditor Training for Automotive Sector (TS 16949: 2002)", conducted by Omnex Consulting & Marketing, USA.

Papers Published in International Journals

1. *Studies on the influence of structurally different peroxides in polypropylene (PP)/ethylene alpha olefin (EOC) thermoplastic vulcanizates (TPVs).* R. Rajesh Babu, N.K.Singha, K.Naskar. **Express Polymer Letters,** 2008, 2, 226–236

2. *Dynamically vulcanized blends of polypropylene and ethylene octene copolymer: Comparsion of different peroxides on mechanical, thermal and morphological characteristics.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Journal of Applied Polymer Science,** 2009, 113, 1836–1852

3. *Dynamically vulcanized blends of polypropylene and ethylene octene copolymer: Influence of various coagents on mechanical and morphological characteristics.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar **Journal of Applied Polymer Science,** 2009, 113, 3207–3221

4. *Melt viscoelastic properties of peroxide cured Polypropylene-ethylene octene copolymer thermoplastic vulcanizates.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Polymer Engineering and Science**, DOI No:*10.1002/pen.21553*

5. *Effects of mixing sequence on peroxide cured polypropylene (PP)/ethylene octene copolymer (EOC) thermoplastic vulcanizates (TPVs). Part. I. Morphological, mechanical and thermal Properties.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Journal of Polymer Research**, DOI No: *10.1007/s10965-009-9354-z*

6. *Effects of mixing sequence on peroxide cured polypropylene (PP)/ethylene octene copolymer (EOC) thermoplastic vulcanizates (TPVs). Part. II. Viscoelastic Characteristics.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Journal of Polymer Research,** DOI No: *10.1007/s10965-010-9388-2*

7. *Dynamically vulcanized blends of polypropylene and ethylene octene copolymer: Influence of various coagents on thermal and rheological characteristics.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Journal of Applied Polymer Science,** DOI No. 10.1002/app.32023

8. *Interrelationships of morphology, thermal and mechanical properties in uncrosslinked and dynamically crosslinked PP/EOC and PP/EPDM blends.* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Express Polymer Letters,** 2010, 4, 197-209

9. *Influence of 1,2-Polybuadiene as coagent in peroxide cured Polypropylene (PP)/Ethylene Octene Copolymer (EOC) Thermoplastic Vulcanizates (TPVs).* R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar. **Materials and design,** DOI No.10.1016/j.matdes.2010.01.053

10. *Phase Morphology and Melt Rheological Behavior of Uncrosslinked and Dynamically Crosslinked Polyolefin blends: Role of Macromolecular Structure*. R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar **(Accepted in polymer bulletin)**

Papers Presented in International Conferences

1. R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar "*Thermoplastic elastomers based on polypropylene and ethylene octene copolymer by dynamic vulcanization*: Effect of various peroxides as crosslinking agent", **January 2008, ICRRM**, IIT Kharagpur, India.
2. R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar "*Mechanical and rheological behavior of peroxide cured polypropylene (PP)/ethylene octene copolymer (EOC) thermoplastic vulcanizates (TPVs)*", **September 2008, APT**, Cochin University of Science and Technology, Kochi, India.
3. R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar "*Optimization of mixing protocol in polypropylene (PP)/ethylene octene copolymer (EOC) thermoplastic vulcanizates (TPVs)*", **January 2009, 5th International Rubber Expo (IRE-09)**, Kolkata, India.
4. R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar, "*Nonlinear Viscoelastic Behaviour of Peroxide Cured Polypropylene (PP)/Ethylene Octene Copolymer (EOC) Thermoplastic Vulcanizates (TPVs)*", **March 2009, PPS-25**, Goa, India.
5. R. Rajesh Babu, Nikhil. K. Singha, Kinsuk Naskar, "*Understanding the behavior of a novel TPV for automotive applications*." **Feburary 2009**, **ICHTC**, IIT Kharagpur, India.

Instrumental expertise

Thermogravimetric analysis (TGA), differential scanning calorimetry (DSC), dynamic mechanical analysis (DMA), Monsanto processability tester (MPT), Rubber processor analyzer 2000 (RPA-2000), Smart rheo (CEAST), scanning electron microscope (SEM), transmission electron microscope (TEM), Fourier transform infrared (FTIR) spectroscopy, Zwick universal testing machine (UTM), Haake rheomix 600-OS, Moore press, Ultraviolet irradiation chamber(UV).

References

Dr. Kinsuk Naskar
Assistant Professor
Rubber Technology Centre
Indian Institute of Technology
Kharagpur, 721302, India
Tel: 0091-3222-281748 (Off)
0091-3222-281749 (Res)
Fax: 0091-3222-282700
E-mail: knaskar@rtc.iitkgp.ernet.in
kinsuk@mailcity.com

Dr. T K Chaki
Professor and Head
Rubber Technology Centre
Indian Institute of Technology
Kharagpur, 721302, India
Tel: 0091-3222-283182(Off)
0091-3222-277804 (Res)
Fax: 0091-3222-282292
E-mail: tapan@rtc.iitkgp.ernet.in

Declaration

I hereby declare that the above information given by me is true to the best of my knowledge.

Place: IIT Kharagpur
Date: (**R.RAJESH BABU**)