Dr. C. Ramesh

J 104, Polymers and Advanced Materials Laboratory

NCL, Pune, India 411008

c.ramesh@ncl.res.in

020 25909116

09423582316

Qualifications

Ph.D., Indian Institute of Technology, New Delhi, India.

Yamada Research Fellow, Osaka University, Osaka, Japan

Postdoctoral Research Associate, Catholic University, Leuven, Belgium

Postdoctoral Research Associate, University of Bristol, Bristol, England

Visiting Scientist, Akzo Nobel Research Laboratories, Arnhem, the Netherlands

Experience

More than twenty years of research experience in the study of structure and morphology of polymers and fibres and their correlation with properties and processing.

Current interests

Exploration of crystalline transition in semicrystalline polymers
In situ studies using ---

- High temperature x-ray diffraction. (HTXRD)
- High temperature Fourier transform infrared spectroscopy(HTFTIR)

Polymer crystallization
Nucleating agents for semi crystalline polymers

Selected Publications

1. Structural Phase Transitions of Syndiotactic Polystyrene
   E. Bhoje Gowd, Kohji Tashiro and C. Ramesh
   Progress in Polymer Science 34, 329, 2009

2. Role of Solvent Molecules as a Trigger for the Crystal Phase Transition of Syndiotactic Polystyrene/Solvent Complex
   E. Bhoje Gowd, Kohji Tashiro and C. Ramesh
   Macromolecules 9814, 41 2008

3. Crystalline phases in Nylon 11: Studies using HTWAXS and HTFTIR
   Smitha S. Nair, C. Ramesh and K. Tashiro
   Macromolecules 2841 39 (2006)

4. Studies on the Crystallization behavior of Nylon 6 in the presence of Layered Silicates using variable temperature WAXS and FTIR
   Smitha S. Nair and C. Ramesh
   Macromolecules 454 38 (2005)

5. Studies on the Clathrate (δ) form of Syndiotactic Polystyrene crystallized by different solvents using Fourier Transform Infrared Spectroscopy
   E. Bhoje Gowd, Smitha S. Nair, C. Ramesh and K. Tashiro
   Macromolecules 7388 36 (2003)

6. Studies on the Crystalline transition behaviour of the Clatharate (δ) form of Syndiotactic Polystyrene Using High Temperature X-ray Diffraction
   E. Bhoje Gowd, S. Smitha Nair and C. Ramesh
   Macromolecules 8509 35 (2002)

7. High Temperature X-ray Diffraction Studies on the Crystalline Transitions in the α and γ Forms of Nylon 6
   C. Ramesh and E. Bhoje Gowd
   Macromolecules 3308 34 (2001)

8. Changes in the Morphology of Drawn Poly(ethylene terephthalate)Yarn on Taut and Free annealing
   C. Ramesh, V. B. Gupta and J. Radhakrishnan
   J. Macromol. Sci. Phys. 299 B36(2) (1997)

9. Studies on the crystallization and melting of Nylon 66 Part I: The dependence of Brill transition temperature on crystallization temperature.
   C. Ramesh, A. Keller and S. J. E. A. Eltink
   Polymer 2483 35 (1994)

10. Structure- Property relationships in heat- set Poly(ethylene terepthalate) fibres I. structure and Morphology
    V. B. Gupta, C. Ramesh and A. K. Gupta
    J.Appl. Polym.Sci. 3115 29 (1984)

****