E. Bhoje Gowd

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DATE OF BIRTH: 10-06-1974

NATIONALITY: Indian

SEX: Male

EDUCATION

1999-2005 **Doctor of Philosophy (Ph.D.) in Chemistry,** University of Pune, Pune, INDIA

* Thesis work was carried out at **National Chemical Laboratory**, Pune, India.

1994-1997 **Master of Science &Technology (M.Sc. (Tech.)) in Polymer Science & Technology,**

Sri Krishnadevaraya University, Anantapur, A.P., INDIA **(80%)**

1991-1994 **Bachelor of Science (B.Sc.) in Chemistry, Physics and Mathematics**

Sri Krishnadevaraya University, Anantapur, A.P., INDIA **(77%)**

PROFESSIONAL EXPERIENCE

August 2010 - Present Ramanujan Fellow, National Institute of Interdisciplinary Science and Technology (NIIST) Thiruvanthapuram, India.

November 2009 – July 2010 Centenary Fellow, Indian Institute of Science, Bengaluru, India.

November 2007 – October 2009 Alexander von Humboldt Fellow, Leibniz Institute of Polymer Science (IPF), Dresden, Germany.

August 2005 – October 2007 Post-Doctoral Fellow, Toyota Technological Institute, Nagoya, Japan.

ACADEMIC HONORS, AWARDS AND FELLOWSHIPS

- **Ramanujan Fellowship**, Department of Science and Technology, Government of India (2010-2015)
- **Member, International Scientific & Advisory Board,** The 18th International Conference on Composite Materials, Jeju Island, Korea (2011)
- **Centenary Fellowship,** Indian Institute of Science, Bengaluru, India (2009-2011)
- **Alexander von Humboldt Foundation Fellowship**, Germany (2007-2009)
- **Bruce Hartmann Award for Young Scientist, 2006, Polychar-14, IUPAC** Conference**,** Japan**.**
- **Post-Doctoral Fellowship** of Toyota School Foundation, Japan (2005-2007)
- **Senior Research Fellowship** awarded by Council of Scientific and Industrial Research, India (2000-2003)
- **Best Young Student Award, 2002, Macro 2002**, Society of Polymer Science, India.
- **A Best Student Paper Award** (*Macromolecules* **35**, 8509, 2002)**,** SPS, Pune Chapter, India.
- Biographical profile appeared in **Who's Who in Science and Engineering** 10th Anniversary Edition (2008-2009)

RESEARCH INTERESTS

- Polymer/inorganic hybrid materials
- Self-assembly in block copolymers and their supramolecular complexes
- Nanotemplates based fabrication of nanostructured materials
- Structure and morphology of semicrystalline polymers and polymer-layered silicate nanocomposites
- Polymer-solvent intercalates and molecular blending
- Morphological consequences of exchange/interchange reactions during solid state (co)polymerization

PROFESSIONAL AFFILIATIONS

- Life member of Society of Polymer Science, India.
- Member of American Chemical Society
- Member of American Physical Society
- Member of Society of Polymer Science, Japan.

PROFESSIONAL ACTIVITIES

Reviewed manuscripts for the publication in the following journals: ACS Applied Materials and Interfaces, Polymer, European Polymer Journal, Journal of Colloid and Interface Science, Current Science, Bulletin of Material Science and Journal of Applied Polymer Science

REFEREED PUBLICATIONS

(* denotes corresponding author**)**

21. B. Kuila,* **E. Bhoje Gowd***, M. Stamm* - Supramolecular assembly of poly(styrene)-*b*-poly(4-vinylpyridine) and 1-pyrenebutyric acid in thin film and their use for nanofabrication.
    ***Macromolecules* 43**, 7713 - 7721 (2010)
20. **E. Bhoje Gowd**,* M. Böhme, M. Stamm - In Situ GISAXS study on solvent vapour induced orientation in PS-*b*-P4VP block copolymer thin films.
    IOP Conference Series: Materials Science and Engineering in press (2010)
19. **E. Bhoje Gowd**,* B. Nandan, N.C. Bigall, A. Eychmüller, P. Formanek and M. Stamm - Hexagonally ordered arrays of metallic nanodots from thin films of functional block copolymers. **(Highlighted by "Noteworthy Chemistry", a news weekly published electronically by the American Chemical Society, June 28, 2010)**

Polymer, **51,** 2661-2667 (2010)

18. **E. Bhoje Gowd**,* B. Nandan,* M.K. Vyas, N.C. Bigall, A. Eychmüller, H. Schlörb and M. Stamm - Highly ordered palladium nanodots and nanowires from switchable block copolymer thin films.
Nanotechnology **20**, 415302 (2009)

17. B. Nandan,* **E. Bhoje Gowd**,* N.C. Bigall, A. Eychmüller, P. Formanek, P. Simon and M. Stamm – Arrays of inorganic nanodots and nanowires using nanotemplates based on switchable block copolymer supramolecular assemblies. **(This article was listed as one of the most downloaded article from Advanced Functional Materials in July 2009)**
Advanced Functional Materials **19**, 2805 - 2811 (2009)

16. K. Kumar,* B. Nandan, V. Luchnikov, **E. Bhoje Gowd** and M. Stamm* - Fabrication of metallic microtubes using self-rolled polymer tubes as templates.
Langmuir **25,** 7667 - 7674 (2009).

15. **E. Bhoje Gowd,** C. Ramesh and Kohji Tashiro* - Structural phase transitions of syndiotactic polystyrene.
Progress in Polymer Science **34**, 280 - 315 (2009).

14. **E. Bhoje Gowd,*** Kohji Tashiro* and C. Ramesh – Solvent molecules as a trigger for the crystal phase transition of syndiotactic polystyrene/solvent complex
Macromolecules **41**, 9814 - 9818 (2008)

13. **E. Bhoje Gowd** and Kohji Tashiro* – Structural correlation between crystal lattice and lamellar morphology in the phase transitions of uniaxially oriented syndiotactic polystyrene (δ and δ_e forms) as revealed by simultaneous measurements of wide-angle and small-angle X-ray scatterings.
Macromolecules **41**, 2541 - 2547 (2008)

12. **E. Bhoje Gowd,** N. Shibayama and Kohji Tashiro* - Structural changes during thermally induced phase transitions observed for uniaxially oriented δ form of syndiotactic polystyrene.
Macromolecules **40**, 6291 - 6295 (2007)

11. **E. Bhoje Gowd** and Kohji Tashiro* - Effect of solvent molecules on phase transition phenomena of syndiotactic polystyrene.
Macromolecules **40**, 5366-5371 (2007)

10. **E. Bhoje Gowd,** N. Shibayama and Kohji Tashiro* - Structural changes in thermally induced phase transitions of uniaxially oriented δ_e form of syndiotactic polystyrene investigated by temperature-dependent measurements of X-ray fiber diagrams and polarized infrared spectra
Macromolecules **39**, 8412-8418 (2006)

9. **E. Bhoje Gowd,** Naoya Shibayama and Kohji Tashiro* - Thermally-induced phase transitions in the uniaxially oriented δ form of syndiotactic polystyrene
Macromolecular Symposia **242**, 257-261 (2006)

8. **E. Bhoje Gowd** and C Ramesh* - Effect of poly(ethylene glycol) on the solid-state polymerization of poly(ethylene terephthalate)
Polymer International **55**, 340-345 (2006)

7. **E. Bhoje Gowd** and C. Ramesh* - Morphological consequences of interchange reactions during solid state copolymerization in poly (ethylene terephthalate) and polycarbonate oligomers
Polymer **46**, 7443-7449 (2005)

6. T. Ranganathan, **E. Bhoje Gowd**, C. Ramesh and Anil Kumar* - Main chain thermotropic liquid crystalline polyurethanes containing biphenyl mesogens based on novel AB-type self-polycondensation route: FT-IR and

XRD studies

***Journal of Polymer science Part A: Polymer Chemistry* 43**, 1903-1912 (2005)

5. **E. Bhoje Gowd**, C. Ramesh,* M. S. Byrne, N. Sanjeeva Murthy, and J. Radhakrishnan - Effect of molecular orientation on the crystallization and melting behavior of poly (ethylene terephthalate) fiber

   ***Polymer* 45**, 6707-6712 (2004)

4. **E. Bhoje Gowd**, S. S. Nair, C. Ramesh* and K. Tashiro - Crystalline transitions of the clathrate (δ) form of syndiotactic polystyrene during heating: Studies using high temperature FTIR

   ***Macromolecules* 36**, 7388-7397 (2003)

3. **E. Bhoje Gowd**, S. S. Nair and C. Ramesh* - Crystalline transitions of the clathrate (δ) form of syndiotactic polystyrene during heating: Studies using high temperature X-ray diffraction

   ***Macromolecules* 35**, 8509-8514 (2002)

2. C. Ramesh* and **E. Bhoje Gowd** - High temperature X-ray diffraction studies on the crystalline transitions in the α and γ forms of nylon 6

   ***Macromolecules* 34**, 3308-3313 (2001)

1. N. R. James, **E. Bhoje Gowd**, C. Ramesh* and S. Sivaram - Studies on the crystallization and melting behavior of poly (ethylene 2,6-naphthalate)

   ***Int. J. Polym. Mat.,* 50**, 335-344 (2001)

PUBLISHED CONTRIBUTIONS TO ACADEMIC CONFERENCES

11. **E. Bhoje Gowd** and M. Stamm - Highly ordered nanoporous thin films from block copolymer supramolecular assembly

    Polymeric Materials: Science and Engineering **101**, 1106-1107 (2009)

10. B. Nandan, **E. Bhoje Gowd**, N.C. Bigall, A. Eychmüller, and M. Stamm - Supramolecular assemblies of block copolymers as templates for nanofabrication

    Polymeric Materials: Science and Engineering **100**, 402-403 (2009)

9. **E. Bhoje Gowd** and Kohji Tashiro – Strong correlation between the infrared vibrational frequencies and chain packing mode in the various crystalline modifications of syndiotactic polystyrene

    Polymer Preprints, Japan (SPSJ) **56**, 3808 (2007)

8. **E. Bhoje Gowd,** Kohji Tashiro and C. Ramesh – Role of solvent molecules as a trigger for the crystal phase transition of syndiotactic polystyrene/solvent complex

    Polymer Preprints, Japan (SPSJ) **56**, 3412-3413 (2007)

7. **E. Bhoje Gowd** and Kohji Tashiro - Effect of solvent molecules on δ to γ phase transition of syndiotactic polystyrene.

    Polymer Preprints, Japan (SPSJ) **56**, 675 (2007)

6. **E. Bhoje Gowd,** N. Shibayama and Kohji Tashiro - Structural correlation between crystal lattice and lamellar morphology in the phase transitions of uniaxially-oriented syndiotactic polystyrene δ form

    Polymer Preprints, Japan (SPSJ), **55**, 3559 (2006)

5. **E. Bhoje Gowd,** N. Shibayama and Kohji Tashiro - Conformational changes in uniaxially-oriented δ form of syndiotactic polystyrene investigated through the temperature-dependent measurement of X-ray fiber diagram

    Polymer Preprints, Japan (SPSJ), **55**, 850 (2006)

4. Kohji Tashiro, Makoto Hanesaka, **E. Bhoje Gowd**, Ichiro Tanaka, Takashi Oohara, Nobuo Niimura, Kazuo

Kurihara, Ryota Kuroki, Taro Tamada and Sattoru Fujiwara - Structural refinement of polyoxymethylene based on wide angle neutron diffraction data

Polymer Preprints, Japan (SPSJ), **55**, 851 (2006)

3. **E. Bhoje Gowd** and C. Ramesh -Studies on the solid state copolymerization of poly(ethylene terephthalate) and polycarbonate oligomers. Emerging Trends in Polymers & Textiles, Proceedings of [the] International Conference, IIT, New Delhi, India, Jan. 7-8, 2005, 47-51.
2. **E. Bhoje Gowd** and C. Ramesh – Morphological consequences of interchange reactions during solid state copolymerization in poly (ethylene terephthalate) and polycarbonate oligomers – Proceedings of [the] International Symposium on Advances in Polymer Technology, Cochin, Kerala, India (2004).
1. **E. Bhoje Gowd**, J. Radhakrishnan and C. Ramesh – Effect of molecular orientation on the crystallization and melting behavior of Poly (ethylene terephthalate) fiber – Proceedings of [the] 7th National Conference on Frontiers of Polymer Science and Engineering **(Macro 2002)**, IIT, Kharaghpur, India (2004).