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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 **CSIR-National Chemical Laboratory**, Pune, India.
Thesis Supervisor: Dr. C. Ramesh

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

Dec 2011 – Present **Senior Scientist**, CSIR-National Institute for Interdisciplinary Science and Technology
(CSIR-NIIST), Thiruvanthapuram, India.

Mar 2018 – June 2018 **Raman Research Fellow**, National Tsing Hua University, Hsinchu, Taiwan
(Collaborator: Prof. Rong-Ming Ho)

Mar 2014 – May 2014 **Visiting Scientist**, Stony Brook University, Stony Brook, NY, USA.
(Collaborator: Prof. Tadanori Koga)

Aug 2010 – Aug 2015 **Ramanujan Fellow**, CSIR-National Institute for Interdisciplinary Science and Technology
(CSIR-NIIST), Thiruvanthapuram, India.

Nov 2009 – July 2010 **Centenary Fellow**, Indian Institute of Science, Bengaluru, India.
(Group leader: Prof. S. Ramakrishnan)

Nov 2007 – Oct 2009 **Alexander von Humboldt Fellow**, Leibniz Institute of Polymer Science (IPF), Dresden,
Germany. (Group leader: Prof. Manfred Stamm)

Aug 2005 – Oct 2007 **Post-Doctoral Fellow**, Toyota Technological Institute, Nagoya, Japan.
(Group leader: Prof. Kohji Tashiro)

ACADEMIC HONORS, AWARDS AND FELLOWSHIPS

- **Raman Research Fellowship**, Council of Scientific and Industrial Research, Government of India (2017-2018)
- **Materials Research Society of India (MRSI) Medal** (2016)

- **IUSSTF Research Fellowship**, Indo-US Science and Technology Forum (2013-2014)
- **Ramanujan Fellowship**, Department of Science and Technology, Government of India (2010-2015)
- **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**, The Society for Polymer Science, India.
- **A Best Student Paper Award** (*Macromolecules* **35**, 8509, 2002), The Society for Polymer Science, Pune Chapter, India.

RESEARCH INTERESTS

- Nanostructures based on self-assembly of block copolymers
- Crystallization and morphology of multiphase polymeric systems (in particular biodegradable polymers, block copolymers, conducting polymers, and nanocomposites)
- Polymer/inorganic hybrid materials
- Polymer-solvent complexes and intercalates
- Structural characterization of polymer materials by X-ray scattering techniques

PROFESSIONAL AFFILIATIONS

- Life member of Society for Polymer Science, India.
- Life member of Materials Research Society of India, India.
- Life member of Indian Institute of Metals, India
- Life member of Academy of Microscope Science and Technology
- Life member of Indian society for Advancement of materials and Processing Engineering
- Member of American Chemical Society
- Member of Society of Polymer Science, Japan
- Member of American Physical Society

PROFESSIONAL ACTIVITIES

- Reviewer for DST & CSIR funded project proposals
- Reviewed manuscripts for the publication in the following journals: *Macromolecules*, *Chemical Communications*, *ACS Applied Materials and Interfaces*, *Scientific Reports*, *ACS Sustainable Chemistry & Engineering*, *Langmuir*, *Soft Matter*, *Physical Chemistry Chemical Physics*, *Polymer*, *Industrial & Engineering Chemistry Research*, *Materials Chemistry and Physics*, *Analyst*, *RSC Advances*, *European Polymer Journal*, *Journal of Colloid and Interface Science*, *Applied Surface Science*, *Current Science*, *Bulletin of Material Science*, *Journal of Electronic Materials*, *Polymer Testing*, *Journal of Applied Polymer Science* and *Macromolecular Symposia*.

BOOKS EDITED

1. *Crystallization in Multiphase Polymer Systems*, with S. Thomas, M. Arif, N. Kalarikkal, **Elsevier**, The Netherlands, 2018.

BOOK CHAPTERS

1. S. Nagarajan, K. Deepthi, V. Sivaprasad and **E. Bhoje Gowd***– “Crystallization behavior of crystalline-amorphous and crystalline-crystalline block copolymer containing poly(L-lactide)” in S. Thomas, M. Arif, E. Bhoje Gowd, and N. Kalarikkal eds., *Crystallization in Multiphase Polymer Systems* Chapter 5, 93-122 (2018) Elsevier, The Netherlands.
2. P. Shaiju, **E. Bhoje Gowd*** and H-H Görtz – “Polystyrene: Syndiotactic” in *Reference Module in Materials Science and Materials Engineering*, Elsevier, 02612, (2016) DOI: 10.1016/B978-0-12-803581-8.02612-6
3. **E. Bhoje Gowd*** and C. Ramesh – “Crystallization and polymorphism behaviour of nylon-clay nanocomposites” in J.K. Pandey, K. R. Reddy, A. K. Mohanty and M. Misra eds., *Handbook of Polymer Nanocomposites: Processing, Performance and Application* Chapter 12, 247-265 (2014) Springer: New York.
4. **E. Bhoje Gowd***, S. R. Mallikarjuna, and M. Stamm – “Nanostructures based on self-assembly of block copolymers” in M. Stepanova and S. K. Dew eds., *Nanofabrication* Chapter 8, 191-216 (2012) Springer: New York.

REFEREED PUBLICATIONS

Total Citations as of April 2018: 1008, H-index: 17 (Source: Google Scholar)

(* denotes corresponding author)

1. P. Shaiju, N.S. Murthy and **E. Bhoje Gowd*** - Nonsolvent-Induced Morphological Changes and Nanoporosity in Poly(L-lactide) Films.
Soft Matter, **14**, 1492-1498 (2018)
2. A. M. Joseph, B. Nagendra, P. Shaiju, K.P. Surendran* and **E. Bhoje Gowd*** - Aerogels of Hierarchically Porous Syndiotactic Polystyrene with Dielectric Constant Near to Air.
Journal of Materials Chemistry C, **6**, 360-368 (2018)
3. B. Nagendra, A. M. Joseph, B. Sana, T. Jana and **E. Bhoje Gowd*** - Layered Double Hydroxide Nanoplatelets with Ultra High Specific Surface Area for Significantly Improved Polymer Properties.
ACS Applied Nano Materials, **1**, 111-121 (2018)
4. R. Patel, J.T. Park, M. Patel, J. Dash, **E. Bhoje Gowd**, R. Karpoornath, A. Mishra, J. Kwak and J. H. Kim - Transition-Metal-based Layered Double Hydroxides Tailored for Energy Conversion and Storage.
Journal of Materials Chemistry A, **6**, 12-29 (2018)
5. S. Nagarajan and **E. Bhoje Gowd*** - Star-Shaped Poly(L-lactide) with a Dipyrindamole Core: Role of Polymer Chain Packing on Induced Circular Dichroism and Photophysical Properties of Dipyrindamole.
Macromolecules, **50**, 5261-5270 (2017)
6. N. Angulakshmi, G.P. Kar, S. Bose*, **E. Bhoje Gowd***, S. Thomas, A. M. Stephan* - Physico and electrochemical properties of BaTiO₃-g-GO –laden Poly(ethylene oxide) –Based Nanocomposite Polymer Electrolytes for all-Solid-State Lithium-Batteries.
Materials Chemistry Frontiers, (RSC) **1**, 269-277 (2017)
7. B. Nagendra, C.V.S. Rosely, A. Leuteritz, U. Reuter and **E. Bhoje Gowd***- Polypropylene/Layered Double Hydroxide Nanocomposites: Influence of LDH Intralayer Metal Constituents on the Properties of Polypropylene.
ACS Omega, **2**, 20-31 (2017)
8. A. M. Joseph, B. Nagendra, **E. Bhoje Gowd*** and K.P. Surendran* - Screen-Printable Electronic Ink of Ultrathin Boron Nitride Nanosheets.
ACS Omega, **1**, 1220-1228 (2016)

9. S. Nagarajan, D. Krishnan and **E. Bhoje Gowd***- Structural Evolution of Poly(L-lactide) Block upon Heating of the Glassy ABA Triblock Copolymers Containing Poly(L-lactide) A Blocks.
Polymer, **105**, 422-430 (2016)
10. B. Nagendra, A. Das, A. Leuteritz and **E. Bhoje Gowd***- Structure and Crystallization Behavior of Syndiotactic Polystyrene/Layered Double Hydroxides Nanocomposites.
Polymer International, **65**, 299-307 (2016)
11. P. Shaiju, N.S. Murthy and **E. Bhoje Gowd*** – Molecular, Crystalline and Lamellar Length-scale Changes in the Poly(L-lactide) (PLLA) during Cyclopentanone (CPO) Desorption in PLLA/CPO Co-crystals.
Macromolecules, **49**, 224-233 (2016)
12. P. Shaiju and **E. Bhoje Gowd*** – Structural Phase Transitions of Syndiotactic Polystyrene upon the Guest Extraction Process.
Macromolecular Symposia, **359**, 104-110 (2016)
13. A. M. Joseph, B. Nagendra, K.P. Surendran* and **E. Bhoje Gowd*** - Syndiotactic Polystyrene/Hybrid Silica Spheres of POSS Siloxane Composites Exhibiting Ultralow Dielectric Constant.
ACS Applied Materials and Interfaces, **7**, 19474-19483 (2015)
14. S. Nagarajan and **E. Bhoje Gowd*** - Cold Crystallization of PDMS and PLLA in Poly(L-lactide-*b*-dimethylsiloxane-*b*-L-lactide) Triblock Copolymer and their Effect on Nanostructure Morphology.
Macromolecules, **48**, 5367-5377 (2015)
15. B. Nagendra, K. Mohan and **E. Bhoje Gowd*** - Polypropylene/Layered Double Hydroxide (LDH) Nanocomposites: Influence of LDH Particle Size on the Crystallization Behavior of Polypropylene.
ACS Applied Materials and Interfaces, **7**, 12399-12410 (2015)
16. N.C. Bigall,* B. Nandan, **E. Bhoje Gowd**, A. Horechyy, A. Eychmüller* - High Resolution Metal Nanopatterning by Means of Switchable Block copolymer Templates.
ACS Applied Materials and Interfaces, **7**, 12559-12569 (2015)
17. P. Shaiju and **E. Bhoje Gowd*** – Factors Controlling the Structure of Syndiotactic Polystyrene upon the Guest Exchange and Guest Extraction Processes.
Polymer, **56**, 581-589 (2015)
18. **E. Bhoje Gowd***, T. Koga, M.K. Endoh, K. Kumar, M. Stamm – Pathways of cylindrical orientation in PS-*b*-P4VP diblock copolymer thin films upon by solvent vapor annealing
Soft Matter **10**, 7753-7761 (2014)
19. K. S. Deepa, P. Shaiju, M. T. Sebastian, **E. Bhoje Gowd*** and J. James*- Poly(vinylidene fluoride)/La_{0.5}Sr_{0.5}CoO_{3-y} composites: Influence of LSCO particle size on the structure and dielectric properties
Phys. Chem. Chem. Phys. **16**, 17008-17017 (2014)
20. R.C. Jose, P. Shaiju, B. Nagendra and **E. Bhoje Gowd*** – Influence of host preparation method on the structural phase transitions of syndiotactic polystyrene upon the guest exchange with *n*-alkanes.
Polymer **54**, 6617-6627 (2013)
21. Raj Kumar Roy, **E. Bhoje Gowd** and S. Ramakrishnan* – Periodically grafted amphiphilic copolymers - Nonionic analogues of ionenes.
Macromolecules **45**, 3063 - 3069 (2012)
22. **E. Bhoje Gowd*** and Kohji Tashiro* – Effect of chain-length of *n*-alkane on solvent induced crystallization and solvent exchange phenomenon in syndiotactic polystyrene.
Polymer **52**, 822-829 (2011)

23. 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)
24. **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, **14**, 012015 (2010)
25. **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)
26. **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)
27. 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)
28. 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).
29. **E. Bhoje Gowd**, C. Ramesh and Kohji Tashiro* – Structural phase transitions of syndiotactic polystyrene.
Progress in Polymer Science **34**, 280 - 315 (2009).
30. **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)
31. **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)
32. **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)
33. **E. Bhoje Gowd** and Kohji Tashiro* – Effect of solvent molecules on phase transition phenomena of syndiotactic polystyrene.
Macromolecules **40**, 5366-5371 (2007)
34. **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)
35. **E. Bhoje Gowd**, N. Shibayama and Kohji Tashiro* – Thermally-induced phase transitions in the uniaxially oriented δ form of syndiotactic polystyrene

- Macromolecular Symposia* **242**, 257-261 (2006)
36. **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)
 37. **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)
 38. 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)
 39. **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)
 40. **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)
 41. **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)
 42. 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)
 43. 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

44. J. Imbrogno, M. Sen, S. Kahn, S. Nishitsuji, **E. Bhoje Gowd**, M. K. Endoh, T. Koga - Adsorbed block copolymer nanolayers on solids
Bulletin of the American Physical Society **60**, 2 (2015)
45. **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)
46. 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)
47. **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)
48. **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)

49. **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)
50. **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)
51. **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)
52. Kohji Tashiro, Makoto Hanesaka, **E. Bhoje Gowd**, Ichiro Tanaka, Takashi Oohara, Nobuo Niimura, Kazuo Kurihara, Ryota Kuroki, Taro Tamada and Satoru Fujiwara - Structural refinement of polyoxymethylene based on wide angle neutron diffraction data
Polymer Preprints, Japan (SPSJ), 55, 851 (2006)
53. **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.
54. **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).
55. **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, Kharagpur, India (2002).