



## Dr. Rafiq Ahmed

Assistant Professor

### Contact:

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### Teaching and Research Interest:

- Polymer Rheology and Implication of Structure Development
- Polymer Structure-Property Relationship
- Complex Polymeric Systems
- Polymer (Nano)Composites
- Bio-Polymers

### Education:

2006 – 2011

**Doctor of Philosophy (PhD)**

Dissertation: Poly(lactic acid) stereocomplex formation in the melt: limitations and prospectives (**ISBN: 978-90-386-2890-5**)

Supervisors: Prof. Dr. P.J. Lemstra and Dr. D.G. Hristova-Bogaerds

Laboratory of Polymer Technology,  
Department of Chemical Engineering and Chemistry,  
Eindhoven University of Technology, Eindhoven,  
The Netherlands

1996 – 1997

**Master of Science (M.Sc.)**

Dissertation: Controlling the Morphology of Hematite Particles for Magnetic Tape Applications

Supervisors: Prof. Dr. Najma Shams

Department of Applied Chemistry and Chemical Technology,  
University of Karachi, Karachi, Pakistan

1993 – 1996

**Bachelor of Science (B.Sc. (Hons))**

Department of Applied Chemistry and Chemical Technology,  
University of Karachi, Karachi, Pakistan

### Additional Academic Certificates:

Title awarded “**Registered Polymer Scientist RPK**” (Dutch name: Register PolymeerKundige) after completion of four modulus of postgraduate courses from the National Dutch Research School (PTN) ([www.ptn.nu](http://www.ptn.nu)) which includes:

**Polymer Chemistry (module A); Polymer Physics (module B); Polymer Properties (module C) Polymer Rheology and Processing (module D & E).**

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## Publications

1. Dissertation: Poly(lactic acid) stereocomplex formation in the melt: limitations and prospectives (**ISBN: 978-90-386-2890-5**) – **Rafiq Ahmed**
  2. “Poly(lactic acid) stereocomplex formation in the early stages of melt extrusion (from solid state blend)” **R. Ahmed**; D.G. Hristova-Bogaerds; P.J. Lemstra. (*To be submitted*)
  3. “Poly(lactic acid) stereocomplex formation in the melt: Stereocomplexation in the homogeneously mixed blends” **R. Ahmed**; D.G. Hristova-Bogaerds; P.J. Lemstra. (*To be submitted*)
  4. “Poly(lactic acid) stereocomplex formation in the melt: Effect of Flow and Melt Memory” **R. Ahmed**; D.G. Hristova-Bogaerds; P.J. Lemstra. (*To be submitted*)
  5. “Enhanced PLA stereocomplex formation in the melt processed binary PDLA/PLLA blends via nanocomposite formation” **R. Ahmed**; D.G. Hristova-Bogaerds; P.J. Lemstra. (*To be submitted*)
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## Conference Papers

1. Rheological Phenomena in Ternary Polymeric Solutions of UHMWPE and PP in Paraffine; **Rafiq Ahmed**, Denka Hristova-Bogaerds, P.J. Lemstra; Dutch Polymer Days (DPD), Lunteren, the Netherlands, 2008
  2. Poly(lactic acid) stereocomplex formation in the early stages of melt extrusion (from solid state blend); **Rafiq Ahmed**, Denka Hristova-Bogaerds, P.J. Lemstra; Dutch Polymer Days (DPD), Lunteren, the Netherlands, 2009
  3. Poly(lactic acid) stereocomplex formation in the melt: Stereocomplexation in the homogeneously mixed blends; **Rafiq Ahmed**, Denka Hristova-Bogaerds, P.J. Lemstra; Dutch Polymer Days (DPD), Veldhoven, the Netherlands, 2010
  4. Enhanced PLA stereocomplex formation in the melt processed binary PDLA/PLLA blends via nanocomposite formation; **Rafiq Ahmed**, Denka Hristova-Bogaerds, P.J. Lemstra; Dutch Polymer Days (DPD), Veldhoven, the Netherlands, 2011
  5. Stereocomplex-PLA from melt: Effect of Melt-memory and Flow; Denka Hristova-Bogaerds, **Rafiq Ahmed**, Pim Lohmeijer, P.J. Lemstra; EUPOC 2011, Gargnano, Italy
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