

Dr. Hsinjin Edwin Yang, *Pioneer Scientific Solutions, LLC*

* **Ph. D. in Physical Chemistry/Polymer Science and Engineering, University of Massachusetts, Amherst, MA**

* **Currently work as Technical Consultant in “Polymers and Materials for Flammability, Biomedical, Optical and Engineering Applications” for MCI, GAF, Niagara Bottling, and Environmental Adaptability State Key Lab. Of Industrial Products (EAS) - China National Electric Apparatus Research Institute (CEI)**

Consulting/Research Areas: (Website: www.pioneerscientificsolutions.blogspot.com)

- **Crazing/Cracking Mechanisms and Failure Analysis of Performance Plastics**
- **Biomedical Devices and Medication Delivery**
- **Ophthalmic Optical (Polycarbonate) Lenses**
- **Polymer Processing – Injection Molding, Extrusion and Compounding**
- **Materials Flammability Science and Technology (MCC: Micro-Combustion Calorimeter)**
- **Durability and Reliability of Photovoltaic Materials**
- **Long Term Aging Performance and Service Life Prediction**
- **Polyesters, Recycled PET & Barrier Properties Improvement**
- **Miscibility of Polymer Blends and Nano-composites**
- **Materials Compatibility and Metals Corrosivity with Biofuels/Gasoline**

Website: www.pioneerscientificsolutions.blogspot.com

Summary: More than 27 years experiences of R & D, product and business development, quality/regulatory/safety issues and management in the areas of Polymers/Materials Science and Engineering for infrastructure in renewable energy systems, biomedical devices/packaging, medication delivery system, optical ophthalmic lens, imaging materials and polymer blends.

10/12/- Present President, Pioneer Scientific Solutions, LLC – Consulting and Research for Polymers and Materials

06/12 - present Honorary Fellow, Dept. of Mechanical Engineering, Univ. of Wisconsin at Madison.

05/12 – present Board of Director and Vice Chair, Plastics in Building and Construction, SPE

**07/09 - 10/13 Distinguished Members of Technical Staff, Global Tech. Leader for Polymers/Materials, Corporate Research, UL LLC, Northbrook IL
Global Tech./Projects Leader for improving and developing safety standards of Polymers/Materials; Technology Leader :“Polymers and Materials Flammability by Micro-Combustion Calorimeter”**

8/95 – date Adjunct Professor, Dept. of Chemistry, Univ. of Missouri at Kansas City.

05/06 –07/09 Sr. Research Scientist/Sr. Manager, Materials Science & Engineering, Device Center of Excellence, Baxter Healthcare Corporation, Round Lake, IL; Received Technology & Team Award for Specialty Therapy Product – Medication Delivery, May 2009.

08/98- 04/06 R & D Manager, Optical Thermoplastics & Processing, Essilor (The World Leader in Ophthalmic Optical Products with Annual Sale of \$ > 5b)

7/93 – 08/98 Project Manager & Technical Leader in Polymers for Biomedical Applications, Specialty Plastics R & D, Eastman Chemical Company

6/86 - 6/93 Research Associate & Group Leader, Imaging Materials, Eastman Kodak Co.

*** Technical and Management Leadership:**

- Has offered **more than 50 invited seminars** to esteemed universities (e.g. Stanford, Wisconsin-Madison, Univ. of Massachusetts-Amherst, U. of Rochester, U. of Missouri, U. of Tokyo, Kyoto U.), Industrial Co. and technical conferences.
- **Technical Program Chair**, Engineering Properties and Structures Div., SPE/ANTEC (2015-6).
- **Co-chair** for NIST-UL Photovoltaic (PV) polymer workshop (2010) and research consortium (2011)
- Organizing Committee/Session Chair for Baxter Global Medical Plastics Conference, Oct. 2007.
- Discussion Leader for “Rheology and Processing of Advanced Materials” session, Polymer Innovation at Emerging Boundaries of Science Technology, ACS POLY 2006 Biennial, May 21-24, 2006, Key Biscayne, FL.
- Co-Organizer for Molding Technology Symposium of International Polymer Processing Society Conference (PPS-20), University of Akron, Akron, OH, USA, June 20 ~ 24, 2004.
- Editorial Advisory Board for “Materials Science Foundation”, Trans Tech Publications, Ltd., Switzerland, March 1998 - 2005.
- Editorial Board for “Journal of Polymer Research”, January 1995 - 2005.
- Symposium Chairman, "Polymer Alloys and Blends", International Pacific Chemical Congress Meeting, Honolulu, Hawaii, December 17-22, 1995.
- Planning Committee and Workshop Chairman, 6th Annual Eastman Worldwide Technical Conference, Kingsport, TN, May 18-20, 1994.

Publications & Patents: 25 patents (21 issued & 4 filed), and more than 50 publications in Journals or Book Chapter or Conference Proceedings.