

Dr. Ricardo Herbé Cruz-Estrada

RESEARCH INTERESTS

Main research interests include:

- Structure formation in electro-conducting polymer blends.
- Processing of electro-conductive polymer blends, especially those based on intrinsically conducting polymers (ICPs).
- The establishment of the relationship microstructure-properties in polymer-based composites.
- Processing of polymer blends.
- Recycling of solid wastes.
- Applications of wood-polymer composites (WPCs) as building materials.
- Applications of polymer composites with electro-conductive properties.

Wood-plastic composites from blends of solid urban wastes.

Research description: Taking advantage at its best of wood and plastic wastes. Creation of alternative materials with structural applications for the construction industry, competitive in price and quality, and with the combined characteristics of plastic and wood. Benefits: Positive impact on the environment, diminishment of the use of pure raw materials, promotion of recycling culture, etc.

Conducting polymer materials for ESD protection.

Research description: Formation of elongated structures of an intrinsically electro-conducting polymer (ICP) embedded within insulating polymers, and longitudinally oriented in the fiber-like composites. Potential application: Carpet and textile industries as antistatic fibers. Results will serve to establish a simple and effective processing method for the development of these types of materials. Use of recycled thermoplastics as insulating matrices.

HOBBIES

- Physical exercise: Swimming, gym, jogging, etc.
- Listening to good music: Jazz, classical, pop, rock, electronic, etc.(any language).
- Dancing: Pop, tropical, etc.(any kind and language).
- Karaoke singing.
- Cinema, theatre and opera.
- Dining out or just having a drink with a good friend or bunch who can keep an interesting conversation.
- Travelling: Abroad, within my own Country (whenever is possible!), or just sightseeing around my home City and State's countryside.