

**Title:** **A review of Crystallization techniques for the analysis of the CCD in polyolefins from a personal perspective. Latest research in Dynamic Crystallization.**

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Reference 8: \_\_\_\_\_  
Reference 9: \_\_\_\_\_  
Reference 10: \_\_\_\_\_  
Reference 11: \_\_\_\_\_  
Reference 12: \_\_\_\_\_

**Images:**

Images Guidelines: *Please provide maximum one, on a separate file (doc, pdf, tiff, gif, or bmap), and at a reasonable resolution.*

**Abstract:**

*The Chemical Composition Distribution (CCD) is the most discriminating microstructure feature in LLDPE resins and complex Propylene-Ethylene copolymers.*

*The analysis of the CCD became important with the development of Ziegler catalyzed LLDPE, which showed a breakthrough improvement in blown film applications. In the first years of production, it was obvious that process and catalyst conditions could modify significantly the LLDPE performance and thus, the emphasis in the urgent analysis and understanding of its composition distribution.*

*Given the semicrystalline nature of these polyolefins and that comonomer incorporation would result in irregularities within the chain, it was evident that techniques to measure the CCD could be based on a crystallization process. Along the talk, the development of crystallization techniques such as TREF, Calorimetry, CRYSTAF, CEF and Dynamic Crystallization will be reviewed, together with anecdotes and personal involvement of the author.*