



蘇安仲 教授 An-Chung SU, PROFESSOR

- 國立台灣大學 化學學士，民國六十六年
- 國立清華大學 化工碩士，民國七十年
- 美國辛辛那提大學 化工博士，民國七十五年
- B.S., Chemistry, National Taiwan University, 1977
- M.S., Ch. E., National Tsing Hua University, 1981
- Ph.D., Ch. E., University of Cincinnati, 1986

主要研究領域

- 高分子結晶與相變
Phase transformation in semicrystalline polymers
- 軟凝體結構演化
Structural evolution in soft condensed matter
- 高分子薄膜結構與形態
Structure/morphology of polymeric thin films
- 高分子半導體
Semiconducting polymers

Main Research Interests

The main theme of Dr. Su's research work is in the fundamental understanding of structure-property relationship in polymers and related materials, spanning from crystals, liquid crystals, blends, composites, networks, to mesoporous materials. Recent efforts are focused on (1) early stage of crystallization in polymers and nanomaterials, emphasizing the continuous structural evolution during phase transformation, and (2) morphological development in semiconducting polymers and composites, emphasizing subsequent effects on their optoelectronic properties. Typical tools adopted include small/wide angle X-ray scattering, electron microscopy, X-ray/neutron reflectivity, along with vibrational/electronic spectroscopy and molecular modeling.

代表作 (Selected Publications)

- S.H. Chen, **A.C. Su**,* C.H. Su, and S.A. Chen, "Crystalline Forms and Emission Behavior of Poly(9,9-di-*n*-octyl-2,7-fluorene)," *Macromolecules* 2005, 38, 379.
- S.H. Chen, **A.C. Su**,* and S.A. Chen, "Noncrystalline Phases in Poly(9,9-di-*n*-octyl-2,7-fluorene)," *Journal of Physical Chemistry B* 2005, 109, 10067.
- C.H. Su, U. Jeng,* S.H. Chen, C.Y. Cheng, J.J. Lee, Y.H. Lai, W.C. Su, J.C. Tsai, and **A.C. Su**,* "Thermodynamic Characterization of Polymorphs in Bulk-crystallized Syndiotactic Polystyrene via Small/Wide Angle X-ray Scattering and Differential Scanning Calorimetry," *Macromolecules* 2009, 42, 4200.
- C.H. Su, U. Jeng,* S.H. Chen, S.J. Lin, W.R. Wu, W.T. Chuang, J.C. Tsai, and **A.C. Su**,* "Nanograin Evolution in Cold Crystallization of Syndiotactic Polystyrene as Illustrated via In-situ Small/Wide Angle X-ray Scattering and Differential Scanning Calorimetry," *Macromolecules* 2009, 42, 6656.
- Y.K. Lan and **A.C. Su**,* "Polymer Nucleation: The δ Mystery," *Macromolecules* 2010, 43, 7908.
- C.F. Yang, Y.F. Huang, J. Ruan,* and **A.C. Su**,* "Extensive Development of Precursory Helical Pairs Prior to Formation of Stereocomplex Crystals in Racemic Polylactide Melt Mixture," *Macromolecules* 2012, 45, 872.
- C.Y. Chen, C.F. Yang, U. Jeng, and **A.C. Su**,* "Intrinsic Metastability of the α' Phase and Its Transformation to α Crystals during Isothermal Cold-crystallization of Poly(L-lactide)," *Macromolecules* 2014, 47, 5144.
- P.H. Chen,* Y.K. Lan, S.J. Lin, J.C. Tsai, U. Jeng, and **A.C. Su**,* "Crystallization of α versus β phases in syndiotactic poly(styrene-*stat*-3-methylstyrene) and poly(styrene-*stat*-4-methylstyrene)," *ACS Applied Polymer Materials* 2019, 1, 251-258.