淡江時報 第 634 期

**CHEN WEI-YEN’S BREAKTHROUGH IN RESEARCH:**

**英文電子報**

Recently, Professor Chen Wei-yen (Dept. of Physics), specializing in the theory of superconductor, achieves an unprecedented breakthrough in the field of physics in the past forty years with two research theories: “the topographical measures under contingent positional energy” and “the sequential and non-sequential measures and apex effects of second type of superconductor.” Chen said, “My dedication to this research field is the source of my greatest joy.”
  
  
Wu Maw-kuen, the incumbent chair of National Science Council, also a well-known scholar in superconductor, is Chen Wei- yen’s student. As Chen indicated, “The research project of ‘the topographical measures under contingent positional energy’ was published in the European science journal - ELSEVIER last year. Physicists have started researching this field since 1968: N. D. Mermin verified the non-existence of long-term sequence in a two-dimensional system, while J. M. Kosterlitz and D. J. Thouless sustained the concept of long-term sequence. Chen pointed out that his research incorporates the concept of “contingent positional energy,” a move no one bold enough to take, and succeeds in mapping out its effect on topographical measures.
  
  
As to the second research project, Chen Wei-yen said that some related experiments had been done in 1960s, but no theory is able to offer any explanations till today. He indicated that after ten years’ continuous calculation, a theory conforming to the results of experiment is finally established on the based quantum model, which was published in the British science journal Superconductor Science and Technology（SUST）.
  
Professor Chen Wei-yen, always enjoying himself in the world of physics, said bashfully, “Sometimes being completely preoccupied with finding solutions to problems, I fail to respond to accosts addressed to me.” (~ Han-yu Huang )