

RESEARCH CONTRIBUTIONS

1. During my graduate studies at Urbana-Champaign, Illinois (1984-1988) I worked under the supervision of **Professor A.J. Leggett who got the Nobel prize in Physics in 2003**. Under his supervision and in collaboration with Professors David Pines and Chris Pethick and B. Arfi we developed a transport theory that explains most of the experimental data on different transport coefficients in anisotropic superconductors. Papers 3-4 in my list of publications refer to this collaborative work.
2. During my post-doctoral Period at the **Theoretical Physics Institute** at the University of Minnesota I continued to work on transport and relaxation properties in anisotropic superconductors all these work was published in high quality journals papers 5-7 in my list of publication. I also started a collaborative work with Professor O.T. Valls, which was continued later on by his Ph.D. student Steve Pierson (paper 11).
3. After I joined KFUPM in the fall of 1989 I continued to work in the area of superconductivity but due to the lack of theorists in Condensed Matter Physics in our Department I could not keep my excitement at a high level along the years. So, I decided after my summer visit to USA in 1992 to start working in the area of transport in amorphous material. I was lucky to collaborate with experts in this fields from the theoretical (K.A. Matveev, University of Minnesota), and experimental (D.E. Ephron and M.R. Beasley from Stanford University). Our collaborative work resulted in two important papers 13-14 in my publication list.
4. My recent work with Drs. Al-Haidari, Abdlmonem and Nasser on quantum scattering, is a field of growing interest and we hope that in the near future we succeed in imposing our views in this field. Our research group in this area is increasing in size and our hope is that we will excell and make our work more visible in the literature.