



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Saraf Nawar	Project Number S0515
Project Title Synthesis of Novel Zintl Phase Compounds for Thermoelectric Applications	
Abstract Objectives/Goals Synthesis of doped Zintl phase compound and structural and thermoelectric analysis Methods/Materials metal flux synthesis technique was used to synthesize the doped compounds. Subsequent characterization by x-ray powder diffraction and other properties. Results Synthesis of viable doped compound on high yield. Structural characterization indicated a ideal compound. Conclusions/Discussion Novel compound was synthesized.	
Summary Statement Synthesis of new Zintl phase compounds to be used for thermoelectric applications	
Help Received worked at UC-Davis chemistry lab	