



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Josselyn Alvarez</b>	<b>Project Number</b> <b>S0902</b>
<b>Project Title</b> <b>Watts All This Talk about Radiation?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The goal of this project was to determine the amount of radiation a cell phone gives off and if the distance away from the cell phone affects the amount of radiation given off. <b>Methods/Materials</b> In this project, the researcher used a Digital Microwave Oven Leakage Meter to measure the amount of radiation released in $\text{mW}/\text{cm}^2$ , a ruler to measure the distance away from the phones, and ten different brands of cell phones. First, the cell phone was placed on a table. The DMOLM was placed at a distance of 5 cm, then 10 cm, then 15 cm respectively away from the cellphone. Then, a phone call was made using another phone to the experimental phone. The amount of radiation was read as registered in the DMOLM. The phone was turned 180 degrees, then took the reading and recorded it. The same procedure was done with nine (9) other phones, three trials (both front and back) for each phone. <b>Results</b> The study proved that the bigger the distance between the phone and DMOLM, the less radiation was recorded. <b>Conclusions/Discussion</b> The Samsung SIV, one of the most commonly used phones, gives off the most radiation at three different distances.	
<b>Summary Statement</b> Measuring cell phone radiation emission.	
<b>Help Received</b>	