



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2019 PROJECT SUMMARY**

<b>Name(s)</b> <b>Eva Chen</b>	<b>Project Number</b> <b>J0608</b>
<b>Project Title</b> <b>Revisit to the Synthesis of 1-(2-fluorophenyl)-1H-imidazole</b>	
<b>Abstract</b> <b>Objectives</b> My objective is to get the correct building block for future medicinal compounds (which is 1-(2-fluorophenyl)-1H-imidazole) and get a high yield percentage. <b>Methods</b> I tested phenyldihalide variety, base variety, reaction time, and the reaction temperature. These reactions varieties were tried in hope to synthesize 1-(2-fluorophenyl)-1H-imidazole. <b>Results</b> After many trials and errors, I was successfully able to synthesize 1-(2-fluorophenyl)-1H-imidazole with a high yield percentage. <b>Conclusions</b> Using 2-iodo-1-fluorobenzene as the phenyldihalide and potassium carbonate instead of cesium carbonate as base led to the synthesis of my desired product.	
<b>Summary Statement</b> After many trials and errors I was successfully able to synthesis 1-(2-fluorophenyl)-1H-imidazole.	
<b>Help Received</b> Qiao-hong Chen, California State University Fresno	