

## Rickdeb Sen

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<b>Project</b>	Throwing DARTs at the surface
<b>Fields of interest</b>	Surface chemistry, Mass Spectroscopy
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### Introduction

The ever increasing miniaturization of devices concomitantly increases the importance of surfaces of the active components. While study in the solution phase proves to be easy due to a wide array of analysis techniques, study on solid surfaces are hampered by several factors. Although several methods are afoot to alleviate these problems via various separate and often disparate techniques, they are often reliant on high vacuum methods (for example, XPS), the use of various labels (making them highly specific) or indirect analysis by contact angle changes. Through our technique we wish to develop a novel method using mass spectroscopy under ambient conditions to study label-free surface reactions. Thus our method will be both generally applicable to a wide range of reactions while being cheaper and easier to operate. We will be employing Direct Analysis in Real Time (DART) Mass Spectroscopy in a novel fashion to achieve this goal.

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