

# CO<sub>2</sub>-free hydrogen production by catalytic pyrolysis of hydrocarbon feedstocks in molten Ni-Bi

## Supporting Information

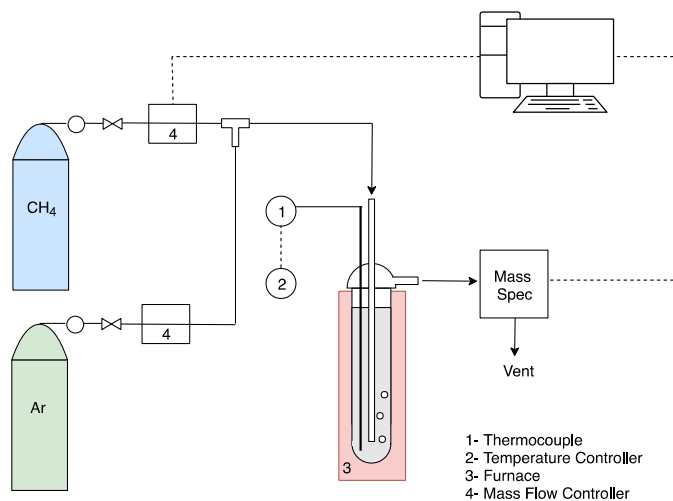
Clarke Palmer<sup>a†</sup>, Elaine Bunyan<sup>a†</sup>, John Gelinas<sup>a</sup>, Michael J. Gordon<sup>a</sup>, Horia Metiu<sup>b</sup>, Eric W. McFarland<sup>a\*</sup>

<sup>a</sup>Department of Chemical Engineering, University of California–Santa Barbara, Santa Barbara, CA, USA

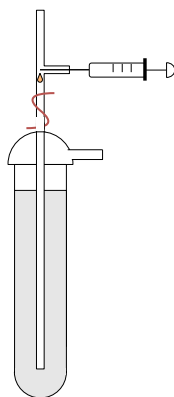
<sup>b</sup>Department of Chemistry and Biochemistry, University of California–Santa Barbara, Santa Barbara, CA, USA

<sup>†</sup>Both authors contributed equally.

\*Corresponding author. Email: ewmcfar@engineering.ucsb.edu.



**Figure S1:** Experiment



**Figure S2:** Injection setup used to deliver crude oil to the molten metal bubble column reactor. The quartz inlet tube was heated to 400 °C in flowing argon in order to vaporize the crude oil sample.