



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

August 31, 2017

Christian F. Kramer
President and Chief Executive Officer
Intermolecular, Inc.
3011 N. First Street
San Jose, California 95134

Re: Intermolecular, Inc.
Form 10-K for the fiscal year ended December 31, 2016
Filed March 3, 2017
File No. 001-35348

Dear Mr. Kramer:

We have completed our review of your filings. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Patrick A. Pohlen, Esq.
Latham & Watkins LLP