

Chiang Tony P.  
Form 4  
September 24, 2012

**FORM 4** UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287  
Expires: January 31, 2015  
Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Chiang Tony P.

2. Issuer Name and Ticker or Trading Symbol  
INTERMOLECULAR INC [IMI]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)  
3011 NORTH FIRST STREET  
(Street)

3. Date of Earliest Transaction (Month/Day/Year)  
09/20/2012

\_\_\_\_ Director \_\_\_\_\_ 10% Owner  
 Officer (give title below) \_\_\_\_\_ Other (specify below)  
Chief Technology Officer

SAN JOSE, CA 95134  
(City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
\_\_\_\_ Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
			Code	V	Amount or Price		
Common Stock, \$0.001 par value	09/20/2012		M		4,499 A \$ 0.1	D	
Common Stock, \$0.001 par value	09/20/2012		S <sup>(1)</sup>		4,499 D 7.2184 (3)	D	
Common Stock, \$0.001 par value	09/21/2012		M		13,114 A \$ 0.1	D	

Edgar Filing: Chiang Tony P. - Form 4

Common Stock, \$0.001 par value	09/21/2012	S <sup>(1)</sup>	13,114	D	\$ 7.2224 <u>(4)</u>	13,200	D
Common Stock, \$0.001 par value	09/24/2012	M	10,513	A	\$ 0.1	23,713	D
Common Stock, \$0.001 par value	09/24/2012	S <sup>(1)</sup>	10,513	D	\$ 7.0664 <u>(5)</u>	13,200	D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

SEC 1474  
(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Amount or Number of Shares	
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	
Stock Option (Right to Buy)	\$ 0.1	09/20/2012		M	4,499	<u>(2)</u>	06/14/2015	Common Stock	4,499
Stock Option (Right to Buy)	\$ 0.1	09/21/2012		M	13,114	<u>(2)</u>	06/14/2015	Common Stock	13,114
Stock Option (Right to Buy)	\$ 0.1	09/24/2012		M	10,513	<u>(2)</u>	06/14/2015	Common Stock	10,513

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Chiang Tony P. 3011 NORTH FIRST STREET SAN JOSE, CA 95134			Chief Technology Officer	

## Signatures

/s/ Tony P.  
Chiang

09/24/2012

\*\*Signature of  
Reporting Person

Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
  - \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The sale reported was effected pursuant to a Rule 10b5-1 Sales Plan adopted by the Reporting Person on May 14, 2012.  
The option was immediately exercisable in full on June 15, 2005; however, the shares vested pursuant to the following schedule:  
    - (2) Twenty-five percent (25%) of the shares subject to the original option (125,000 shares) vested on the first anniversary measured from May 9, 2005 ("Vesting Commencement Date") and the remaining shares vested in 36 successive equal monthly installments thereafter on each monthly anniversary date of Vesting Commencement Date.
  - (3) The transaction was executed in multiple trades in prices ranging from \$7.16 to \$7.35, inclusive. The price reported in Column 4 above reflects the weighted average sale price. The Reporting Person hereby undertakes to provide upon request to the SEC staff, the Issuer, or a stockholder of the Issuer, information regarding the number of shares and prices at which the transaction was effected.
  - (4) The transaction was executed in multiple trades in prices ranging from \$7.03 to \$7.18, inclusive. The price reported in Column 4 above reflects the weighted average sale price. The Reporting Person hereby undertakes to provide upon request to the SEC staff, the Issuer, or a stockholder of the Issuer, information regarding the number of shares and prices at which the transaction was effected.
  - (5) The transaction was executed in multiple trades in prices ranging from \$7.00 to \$7.14, inclusive. The price reported in Column 4 above reflects the weighted average sale price. The Reporting Person hereby undertakes to provide upon request to the SEC staff, the Issuer, or a stockholder of the Issuer, information regarding the number of shares and prices at which the transaction was effected.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.