longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

	pe Response	-,														
1. Name and Address of Reporting Person - Kim Jason S.				2. Issuer Name and Ticker or Trading Symbol Molecular Templates, Inc. [MTEM]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner					
(Last) (First) (Middle) C/O MOLECULAR TEMPLATES, INC., 9301 AMBERGLEN BLVD., SUITE 100				3. Date of Earliest Transaction (Month/Day/Year) 02/15/2022						X	X Officer (give title below) Other (specify below) See remarks					
(Street) AUSTIN, TX 78729				4. If Amendment, Date Original Filed(Month/Day/Year)						_X_1	6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting PersonForm filed by More than One Reporting Person					
(Cit	ty)	(State)	(Zip)			Ta	ble I - I	Non-Deri	vative Secu	urities A	Acquired,	, Disposed o	of, or Benef	icially Owned	l	
1.Title of S (Instr. 3)	Security		2. Transaction Date (Month/Day/Year	Execu any	2A. Deemed Execution Datany (Month/Day/Y		Transa ode ostr. 8)	(A	4. Securities Acq (A) or Disposed (Instr. 3, 4 and 5)		(D) Own Tran	mount of Sened Followingsaction(s) ar. 3 and 4)		l (	wnership orm: B irect (D) O r Indirect (I	Nature f Indirect eneficial
							Code	V A	Amount (A) or (D)		rice			(I <sub>)</sub>		Instr. 4)
			Table II					in this f a currer	orm are noting the orthogonal of the orthogonal of the orthogonal	ot requ OMB co Benefici	uired to note on the control of the	respond u umber.		on containe form display		474 (9-02)
1. Title of Derivative Security (Instr. 3)		*****	3A. Deemed Execution Date, if	4. Transact	5. N tion Der Sec or I (D)	Number rivative surities quired (Disposed	of 6. Ex (MA)	in this f a currer ed, Dispo ptions, co	orm are noting valid (seed of, or lawertible sections)  or a section of the secti	Benefici ecurities d 7. of Se	uired to note on the control of the	Amount	8. Price of	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s	10. Ownershi Form of Derivativ Security: Direct (D or Indirect	11. Natur of Indirec Beneficia Ownershi (Instr. 4)
Derivative Security	Conversion or Exercise Price of Derivative	Date	3A. Deemed Execution Date, if any	4. Transact	uts, calls 5. N Der Sec Acc or I (D) (Ins	Number rivative surities quired (ADisposed Str. 3, 4,	of 6. Ex (M	in this f a current red, Disponitions, con Date Exe expiration I	orm are notify valid (seed of, or Invertible services able and Date (//Year)	oot requirement of re	uired to a control not ially Own es)  Title and f Underlying curities	Amount	8. Price of Derivative Security	9. Number of Derivative Securities Beneficially Owned Following Reported	10. Ownershi Form of Derivativ Security: Direct (D or Indirect	11. Natur of Indirec Beneficia Ownershi (Instr. 4)

## **Reporting Owners**

	Relationships				
Reporting Owner Name / Address	Director	10% Owner	Officer	Other	
Kim Jason S. C/O MOLECULAR TEMPLATES, INC. 9301 AMBERGLEN BLVD., SUITE 100 AUSTIN, TX 78729			See remarks		

# **Signatures**

/s/ Jason S. Kim	02/17/2022
**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).
- 25% of the shares subject to the option shall vest on February 15, 2023, and thereafter, the remaining 75% of the shares subject to the option shall vest pro rata on a monthly basis over the (1) 25% of the shares 1 following 36 months.

#### Remarks:

President and Chief Operating Officer

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.