

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>THOMPSON JOHN PHD</u>  (Last) (First) (Middle) <u>C/O SENESCO TECHNOLOGIES INC</u>  (Street) <u>NEW BRUNSWICK NJ 08901</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>SENESCO TECHNOLOGIES INC [ SNT ]</u>  3. Date of Earliest Transaction (Month/Day/Year) <u>12/16/2003</u>  4. If Amendment, Date of Original Filed (Month/Day/Year)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  <input checked="" type="checkbox"/> Director 10% Owner  <input checked="" type="checkbox"/> Officer (give title below) Other (specify below)  <u>Executive VP of R&amp;D</u>  6. Individual or Joint/Group Filing (Check Applicable Line)  <input checked="" type="checkbox"/> Form filed by One Reporting Person  Form filed by More than One Reporting Person
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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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

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 Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Common Stock Option <sup>(1)</sup>	\$3.15	12/16/2003		A		20,000 <sup>(1)</sup>		12/16/2003	12/16/2013	Common Stock	20,000	\$0	160,000 <sup>(2)</sup>	D	

Explanation of Responses:

1. Such options were granted to Dr. Thompson pursuant to the Company's 1998 Stock Incentive Plan, as amended, with one-third of such options vesting on the date of grant, one-third of such options vesting on December 16, 2004, and one-third of such options vesting on December 16, 2005.
2. Includes multiple option grants with different exercise prices and vesting dates.

/s/ John E. Thompson                      12/17/2003  
\*\* Signature of Reporting Person                      Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.  
\* 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).  
Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.  
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 Number.