BIOANALYTICAL SYSTEMS INC

2701 Kent Avenue

Form S-8 May 19, 2005					
SECURITIES AND EXCHANGE COMMISSION					
Washington, D.C. 20549					
FORM S-8					
REGISTRATION STATEMENT UNDER					
THE SECURITIES ACT OF 1933					
BIOANALYTICAL SYSTEMS, INC.					
(Exact Name Of Registrant As Specified In Its Charter)					
<u>Indiana</u>	<u>35-1345024</u>				
(State or other jurisdiction of	(I.R.S. Employer Identification No.)				
incorporation or organization)					
2701 Kent Avenue					
West Lafayette, Indiana 47906					
(Address of Principal Executive Offices)					
Bioanalytical Systems, Inc. 1997 Employee					
Incentive Stock Option Plan					
(full title of the plan)					
Michael R. Cox					
Vice President-Finance, Chief Financial Officer and Treasurer					
Bioanalytical Systems, Inc.					

West Lafayette, Indiana 47906

(Name and address of agent for service)

(765) 463-4527

(Telephone number, including area code, of agent for service)

Copies to:

Stephen J. Hackman

Ice Miller

One American Square, Box 82001

Indianapolis, Indiana 46282

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered Common Stock		Proposed Maximum Offering Price Per Unit ³ \$ 6.21	Proposed Maximum Aggregate Offering Price \$ 1,552,500.00	Amount of Registration Fee \$ 182.73
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INFORMATION INCORPORATED BY REFERENCE

The contents of the registrant s Registration Statement on Form S-8, File No. 333-56123, heretofore filed with the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended, are incorporated herein by reference.

¹These are additional securities of the same class, to be offered pursuant to the same employee benefit plan as those registered pursuant to Registration No. 333-56123. Pursuant to General Instruction E of Form S-8, this registration statement covers only the additional shares being registered.

²Pursuant to Rule 416(c), this registration statement shall also cover any additional shares of the registrant's Common Stock which becomes issuable under the 1997 Bioanalytical Systems, Inc. Employee Incentive Stock Option Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction without the registrant's receipt of consideration.

³The registration fee has been calculated pursuant to Rule 457(c) and (h) based upon the average of the high and low prices reported for the Common Stock on May 16, 2005.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned thereunto duly authorized, in the City of West Lafayette, State of Indiana, on May 19, 2005.

BIOANALYTICAL SYSTEMS, INC.

By: /s/ Peter T. Kissinger

Peter T. Kissinger, President and Chief Executive Officer

POWER OF ATTORNEY

Know all men by these presents, that each person whose signature appears below constitutes and appoints Peter T. Kissinger, his true and lawful attorneys-in-fact and agents with full power of substitution and re-substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto those attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that those attorneys-in-fact and agents, or their substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated on May 19, 2005.

/s/ Peter T. Kissinger	
Peter T. Kissinger	President, Chief Executive Officer, and Chairman (Principal Executive Officer)
/s/ Michael R. Cox	Vice President-Finance and Chief Financial Officer
Michael R. Cox	(Principal Financial Officer and Principal Accounting Officer)
/s/ Candice B. Kissinger	Director
Candice B. Kissinger	
/s/ William E. Baitinger	Director
William E. Baitinger	
	Director
Leslie B. Daniels	
	Director
Gayl W. Doster	
/s/ David W. Crabb	Director
David W. Crabb	

BIOANALYTICAL SYSTEMS, INC.

FORM S-8

INDEX TO EXHIBITS

Exhibit Number

Assigned in

Regulation S-K

<u>Item 601</u>		Description of Exhibit
(5)	5.01	Opinion of Ice Miller as to the legality of the securities being registered and consent to use of this opinion in this registration statement
(23)	23.01	Consent of Ernst & Young LLP
	23.02	Consent of KPMG LLP
	23.03	Consent of Ice Miller (included in Exhibit 5.01)
(24)	24.01	Power of Attorney (incorporated by reference to the signature page of this registration statement)