

OCULUS INNOVATIVE SCIENCES, INC.
1129 N. McDowell Blvd.
Petaluma, California 94954

December 21, 2006

VIA FACSIMILE AND ELECTRONIC SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Re: Oculus Innovative Sciences, Inc. — Registration Statement — Form S-1
Registration Number: 333-135584

Ladies and Gentlemen:

Pursuant to Rule 461 of Regulation C under the Securities Act of 1933, as amended, Oculus Innovative Sciences, Inc. (the “Registrant”) hereby requests that the effective date of the above-captioned registration statement on Form S-1 (as amended, the “Registration Statement”), relating to the registration of 3,538,461 shares of the Registrant’s Common Stock (including 461,538 shares subject to the underwriters’ over-allotment option), be accelerated so that it will be declared effective at 4:30 p.m., Eastern Time, on December 21, 2006 or as soon thereafter as may be practicable.

The Registrant acknowledges that should the Securities and Exchange Commission (the “Commission”) or the Commission’s staff (the “Staff”), acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement. The Registrant also acknowledges that the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the filings and the Registrant may not assert Staff comments, the comment process in general or this declaration of effectiveness by the Staff as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. The Registrant understands that the Staff will consider this request as confirmation by the Registrant of its awareness of its responsibilities under the federal securities laws as they relate to the offering of the securities covered by the Registration Statement.

Sincerely,

Oculus Innovative Sciences, Inc.

By: /s/ Robert E. Miller

Robert E. Miller
Chief Financial Officer

cc: Sylvia K. Burks, Esq.