

LUNA INNOVATIONS INC  
Form S-1  
February 10, 2006  
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As filed with the Securities and Exchange Commission on February 10, 2006

Registration No. 333-

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# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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## FORM S-1

### REGISTRATION STATEMENT

Under

The Securities Act of 1933

# LUNA INNOVATIONS INCORPORATED

(Exact name of Registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**8731**  
(Primary Standard Industrial  
Classification Code Number)  
**10 South Jefferson Street, Suite 130**

**54-1560050**  
(I.R.S. Employer  
Identification Number)

**Roanoke, Virginia 24011**

**(540) 552-5128**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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**Kent A. Murphy, Ph.D.**

**President, Chief Executive Officer and Chairman**

**Luna Innovations Incorporated**

**10 South Jefferson Street, Suite 130**

**Roanoke, Virginia 24011**

**(540) 552-5128**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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*Copies to:*

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<b>Reston, Virginia 20190</b>		
<b>(703) 734-3100</b>		

**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. "

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

**CALCULATION OF REGISTRATION FEE**

<b>Title of Each Class of Securities to be Registered</b>	<b>Proposed Maximum Aggregate Offering Price(1)(2)</b>	<b>Amount of Registration Fee</b>
<b>Common Stock, \$0.001 par value</b>	<b>\$57,500,000</b>	<b>\$6,152.50</b>

(1) In accordance with Rule 457(o) under the Securities Act of 1933, the number of shares being registered and the proposed maximum offering price per share are not included in this table.

(2) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

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**The information contained in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

**PRELIMINARY PROSPECTUS**

**SUBJECT TO COMPLETION, DATED FEBRUARY 10, 2006**

**Shares**  
**Common Stock**  
**\$ per Share**

This is the initial public offering of shares of common stock by Luna Innovations Incorporated.

We are offering \_\_\_\_\_ shares of our common stock. We expect the initial public offering price to be between \$ \_\_\_\_\_ and \$ \_\_\_\_\_ per share. Prior to this offering, there has been no public market for our common stock.

We have applied to have the common stock included for quotation on the Nasdaq National Market under the symbol LUNA.

**Investing in our common stock involves risks. See Risk factors beginning on page 7 to read about factors you should consider before buying shares of our common stock.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

	<b>Per Share</b>	<b>Total</b>
Initial public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to Luna Innovations Incorporated	\$	\$

We have granted the underwriters the right to purchase up to an additional \_\_\_\_\_ shares of common stock from us at the initial public offering price less the underwriting discount to cover any over-allotments. The underwriters can exercise this right at any time within 30 days after the offering. We expect that delivery of the shares will be made to investors on or about \_\_\_\_\_,

2006.

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**ThinkEquity Partners LLC**

**WR Hambrecht + Co**

**Merriman Curhan Ford & Co.**

, 2006

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You should rely only on the information contained in this prospectus. We have not, and the underwriters have not, authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer or sale is not permitted. You should not assume that the information contained in this prospectus is complete and accurate as of any date other than the date on the front cover, regardless of the time of delivery, of this prospectus.

We obtained statistical data and certain other industry forecasts used throughout this prospectus from publicly available information, including market research and industry publications. Industry publications generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy and completeness of the information. Similarly, while we believe that the statistical and industry data and forecasts and market research used herein are reliable, we have not independently verified such data. We have not sought the consent of the sources to refer to their reports in this prospectus.

Until \_\_\_\_\_, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

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## Prospectus summary

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before buying shares in this offering. Therefore, you should read this entire prospectus carefully, including the Risk factors section beginning on page 7 and our consolidated financial statements and the related notes. Unless the context requires otherwise, the words we, us and our refer to Luna Innovations Incorporated and its consolidated subsidiaries.

### Overview

We research, develop and commercialize innovative technologies in two primary areas: molecular technology solutions and sensing solutions. We have a disciplined and integrated business model that is designed to accelerate the process of bringing new and innovative products to market. We identify disruptive technology that can fulfill identified market needs and then take this technology from the applied research stage through commercialization in our two areas of focus:

- Ø **Molecular Technology Solutions.** We develop new polymers, nanomaterials and reagents with enhanced performance characteristics by harnessing chemical, physical and biological properties of novel combinations of matter. Examples of our solutions in this area include disease-targeting contrast agents for magnetic resonance imaging, or MRI, nanomaterials for solar cell enhancement, flame retardants and multi-functional protective coatings.
  
- Ø **Sensing Solutions.** We develop integrated sensing solutions to measure, monitor and control chemical, physical and biological properties and have particular expertise in optical, acoustic and wireless technologies. Examples of our solutions in this area include medical monitoring products and industrial instrumentation for aerospace, energy generation and distribution and defense applications.

We have a successful track record in executing our market-driven business model. Our aggregate revenues from the beginning of 2002 through September 30, 2005 were \$67.0 million, consisting of \$46.4 million in contract research revenues and \$20.6 million in product sales and license revenues. Since our inception, we have developed more than a dozen products serving various industries including energy, telecommunications, life sciences and defense. We have created five companies in our areas of focus, sold two of them to industry leaders in their fields, raised private capital for two of our companies, formed one joint venture and entered into four licensing agreements.

Our company is organized into three main groups: our Contract Research Group, our Commercialization Strategy Group and our Products Group. These groups work closely together to turn ideas into products.

**Contract Research Group.** Our Contract Research Group provides applied research to customers in our areas of focus. Our engineers and scientists collaborate with our network of government, academic and industry experts to identify technologies and ideas with promising market potential. After these promising technologies are identified, our Contract Research Group competes to win fee-for-service contracts from government agencies and industrial clients who seek innovative solutions to practical problems that require new technology. We focus primarily on contract research opportunities where we can retain partial or full rights to the

intellectual property developed, and generally obtain full funding of the costs of contracts we undertake from our customers. This approach allows us to cover the costs of early-stage technology development with contract research revenues. Since 2002, our contract research revenues have grown 24.8% in the two-year period ending December 31, 2004, and our Contract Research Group seeks to continually supply our product pipeline with new opportunities.

**Commercialization Strategy Group.** Our Commercialization Strategy Group works closely with our network of federal and industrial customers to identify new market opportunities for our technologies. After ideas are driven to proof of concept in the Contract Research Group, our Commercialization Strategy Group develops detailed business plans for commercially viable products. It is at this stage that we first consider investing our own funds to finance the continued development of a product, which is then managed in our Products Group.

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**Products Group.** Our Products Group currently consists of the following three divisions:

- Ø **Luna Advanced Systems Division.** Most new product opportunities that are approved for further development by our management team are initially allocated to our Luna Advanced Systems Division. Products currently managed in this division include medical diagnostic instruments using our innovative ultrasound technologies, non-destructive industrial testing and homeland security devices, remote and secure wireless asset monitoring systems, flame retardants, multi-functional protective coating systems and blast and ballistic resistant materials. We transfer products to existing or new divisions within our Products Group with the resources needed for the successful commercialization of the technology if we determine that a product line is broad enough or that the market opportunity is sufficiently large.
  
- Ø **Luna nanoWorks Division.** Our Luna nanoWorks Division develops and commercializes innovative products based on carbon nanomaterials that have broad potential applications. This division is developing disease-targeting MRI contrast agents that are designed to be potentially safer than, and technically superior to, contrast agents currently on the market. We currently supply nanomaterials to research laboratories and plan to supply proprietary high value-added carbon nanomaterials to customers who manufacture products such as solar cells, strong and light-weight composites and coatings to shield devices from electromagnetic interference.
  
- Ø **Luna Technologies Division.** Our Luna Technologies Division manufactures and markets test and measurement equipment and integrated sensing solutions. This division's products are used for process and control monitoring in telecommunications, manufacturing, power generation and distribution, down-hole oil and gas production, aerospace and defense applications. Our products have won numerous awards and are sold and distributed throughout North America, Europe, the Middle East and Asia.

We expect that the capital raised in this offering will provide us greater flexibility in funding the commercialization of new technologies and will provide us the opportunity to increase the speed, quality and volume of products that we can develop.

## **Our Growth Strategy**

We have the following key strategies to achieve our goal of accelerating the development and commercialization of innovative technologies and to create successful products in our areas of focus:

- Ø **Focus on developing and commercializing a growing portfolio of innovative products.** We intend to build and commercialize a growing portfolio of high value-added products using innovative technologies and utilize our existing relationships to identify, prioritize and allocate resources to respond rapidly to market needs, and shorten the time to market for new products.
  
- Ø **Transition our mix of revenues to a higher percentage of product sales and license revenues.** We plan to commercialize a growing number of products in order to increase the amount of revenues that we generate from product sales and license payments. To this end, we will seek to expand our distribution network and our ability to

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service our customers. We will also seek to allocate resources to improve our ability to manufacture and shorten the cycle time from idea to market and to monetize our intellectual property portfolio by licensing our technologies. As a result, we believe that product sales and license revenues will comprise a greater portion of our total revenues in the future.

- Ø **Continue to strengthen our Contract Research Group.** We will seek to strengthen our Contract Research Group through increased resource allocation and hiring and by expanding our network of relationships with federal laboratories, major research universities and industry leaders. These steps will provide us the opportunity to grow our applied research business, remain informed of the latest technological advances and increase the quality and volume of high potential technologies that will support our product pipeline.
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- Ø **Expand our intellectual property portfolio in our areas of focus.** We will seek to expand our intellectual property portfolio by applying our disciplined processes to generate know-how and intellectual property through our network of relationships and our own research and development efforts. By continuing to expand our intellectual property, we will seek to enhance our competitive position and develop additional products in these areas.

**Company Information**

We were incorporated as a Virginia corporation in July 1990. In December 1998 we changed our name from FEORC, Inc. to F&S Technologies, Inc., and in July 1999, we changed our name to Luna Innovations Incorporated. In April 2003, we reincorporated through a merger as a Delaware corporation and retained the name Luna Innovations Incorporated. Our principal offices are located at 10 South Jefferson Street, Suite 130, Roanoke, Virginia 24011. Our telephone number is (540) 552-5128. You can access our web site at [www.lunainnovations.com](http://www.lunainnovations.com). Information contained on our website does not constitute part of this prospectus.

LUNA INNOVATIONS is a registered trademark in the United States. Our unregistered trademarks include: our logo (a black and white image of a moth design); TRIMETASPHERES; and ACCELERATING THE INNOVATION PROCESS.

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## The Offering

Proposed Nasdaq National Market symbol	LUNA
Common stock offered by us	shares
Common stock outstanding after this offering	shares
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, which may include working capital, capital expenditures, other corporate expenses and potential acquisitions of complementary products, technologies or businesses. See Use of proceeds.

The number of shares of common stock that will be outstanding after this offering is based on 10,630,935 shares outstanding as of December 31, 2005 and excludes:

- Ø 7,033,517 shares of common stock issuable upon exercise of options outstanding at a weighted-average exercise price of \$0.38 per share, which includes 5,246,017 shares of common stock issuable upon exercise of options outstanding at an exercise price of \$0.20 per share, 200,000 shares of common stock issuable upon exercise of options outstanding at an exercise price of \$0.22 per share and 1,587,500 shares of common stock issuable upon exercise of options outstanding at an exercise price of \$1.00 per share;
- Ø 409,860 shares of common stock reserved for future issuance upon the exercise of options available for grant under our 2003 Stock Plan;
- Ø 6,494 shares of common stock issuable upon exercise of warrants (not subject to escrow) outstanding at a weighted-average exercise price of \$12.92 per share, which includes 3,858 shares of common stock issuable upon exercise of outstanding warrants at an exercise price of \$21.06 per share and 2,636 shares of common stock issuable upon exercise at an exercise price of \$1.00 per share;
- Ø 1,885,490 shares of common stock issuable upon the conversion of the principal amount outstanding under convertible notes issued to Carilion Health System on December 30, 2005 and, assuming we elect to convert all of the accrued interest on these notes into shares of common stock after these notes remain outstanding for a maximum period of up to eight years, up to an additional 905,035 shares of common stock; and
- Ø 122,745 shares of common stock issued or reserved for issuance in connection with the acquisition of Luna Technologies, Inc. that were held in escrow on that date, and 429 shares of common stock issuable upon the exercise of warrants at an exercise price of \$21.06 held in escrow as of that date.

Since December 31, 2005, we granted options to purchase an additional 1,537,250 shares pursuant to our 2003 Stock Plan at an exercise price of \$1.00 per share. We also adopted our 2006 Equity Incentive Plan, subject to stockholder approval, which will be effective upon the completion of this offering. In addition, on February 8, 2006, we issued warrants to purchase 101,773 shares at an exercise price of \$1.00 per share.

Unless otherwise indicated, all information in this prospectus assumes:

- Ø a -for- split of our common stock, to be effected immediately prior to the effectiveness of this offering;
  - Ø the conversion, in accordance with our certificate of incorporation, of all our shares of outstanding Class A Common Stock, Class B Common Stock and Class C Common Stock into shares of our common stock;
  - Ø that the underwriters do not exercise their over-allotment option; and
  - Ø the adoption of our amended and restated certificate of incorporation and bylaws.
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Income (loss) before income taxes	(2,220)	2,018	4,184	2,551	(456)
Income tax expense (benefit)	(652)	886	128	77	(187)
Net income (loss)	<u>\$(1,568)</u>	<u>\$1,132</u>	<u>\$4,056</u>	<u>\$2,474</u>	<u>\$(269)</u>
Net income (loss) per common share:					
Basic	<u>\$(0.31)</u>	<u>\$0.23</u>	<u>\$0.79</u>	<u>\$0.48</u>	<u>\$(0.05)</u>
Diluted	<u>\$(0.31)</u>	<u>\$0.22</u>	<u>\$0.59</u>	<u>\$0.36</u>	<u>\$(0.05)</u>
Weighted-average shares:					
Basic	<u>5,092,545</u>	<u>5,030,428</u>	<u>5,136,001</u>	<u>5,134,984</u>	<u>5,713,926</u>
Diluted	<u>5,092,545</u>	<u>5,141,003</u>	<u>6,902,405</u>	<u>6,946,825</u>	<u>5,713,926</u>

(1) Includes minority interests and excludes interest expense.

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Summary historical and pro forma financial data

(in thousands, except share and per share data)	Pro Forma Year Ended	Pro Forma Nine Months
	December 31, 2004	Ended September 30, 2005
	(unaudited)	
<b>Pro Forma Consolidated Statements of Operations Data:</b>		
Revenues	\$24,316	\$13,300
Cost of revenues	14,683	9,614
Gross profit	9,633	3,686
Operating expense	6,028	4,445
Operating income (loss)	3,605	(759)
Other income (expense)(1)	(259)	( )
Interest income (expense), net	(121)	(87)
Income (loss) before income taxes	3,225	(846)
Income tax expense (benefit)	128	(187)
Net income (loss)	\$3,097	\$(659)
Net income (loss) per common share:		
Basic	\$0.60	\$(0.12)
Diluted	\$0.45	\$(0.12)
Weighted-average number of shares used in per share calculations:		
Basic	5,136,001	5,713,926