

# **ZECOTEK MEDICAL SYSTEMS INC.**

## **MANAGEMENT DISCUSSION AND ANALYSIS FOR THE QUARTER ENDED OCTOBER 31, 2006 AND 2005**

**Dated at March 28, 2007**

This MD&A should be read in conjunction with the audited financial statements for the twelve months ended July 31, 2006. The significant accounting policies are outlined in Note 2 to the Financial Statements of the Company for the year ended July 31, 2006 and for the interim period ended January 31, 2007.

All dollar amounts are expressed in Canadian dollars except where noted. The Company's accounts are maintained in Canadian dollars. The business activities of the Company, carried out through its subsidiaries in Singapore are conducted primarily in Singapore dollars. The rate of exchange on January 31, 2007 as reported by the Bank of Canada, for the conversion of one Singapore dollar into Canadian dollars was \$0.7675.

### **Company Overview**

Zecotek Medical Systems Inc. ("Zecotek" or the "Company") is a bio-photonics technology company developing high-performance crystals, photo-detectors, medical lasers, optical imaging and 3D display technologies for commercial application in the medical imaging industry. Zecotek's operational headquarters, pre-production, and production facilities are located in Singapore. Through its wholly owned subsidiary Zecotek Medical Systems Singapore Pte Ltd. enabling technologies for use in the medical imaging and high-performance laser industries are developed by three distinct operating divisions: Zecotek Imaging Systems Pte. Ltd., Zecotek Laser Systems Pte. Ltd. and Zecotek Display Systems Pte. Ltd. The Company's corporate headquarters is located in Vancouver, B.C. with additional research projects and laboratories in Canada, U.S.A., and Russia. The Company is a Canadian public company trading on the TSX Venture Exchange under the symbol "ZMS.V". On April 20, 2006, the Company's shares began trading on the Frankfurt Stock Exchange under the trading symbol - W11F. On May 15, 2006, the Company released its new website: <http://www.zecotekmed.com>.

### **Medical Imaging**

Zecotek's medical imaging technologies are being developed to enable higher resolution imaging and more detailed diagnoses for faster patient throughput and improved patient outcomes. There is a recognized need for improved diagnostic imaging, due to in part to an aging population and technical advances, to replace previously invasive procedures. The Company is at the forefront of innovation in next-generation imaging, that promises faster patient throughput, enhanced diagnosis, lower unit costs, and improved patient outcomes.

Zecotek has focused development on significant bio-photonics technologies: patented scintillation crystals used in medical imaging devices, new solid-state photo detectors which are insensitive to magnetic fields, and light sources and configurations for high resolution optical imaging.

Zecotek's new and proprietary Lutetium Fine Silicate ("LFS") scintillation crystal emits blue light a key attribute in the design of whole body positron emission tomography ("PET") scanners. LFS is a crystal material which falls into a category of materials known as "scintillators". These materials emit light when exposed to sources of radiation. The light is then captured by photo-detectors and translated into digital signals for imaging purposes. Novel scintillation crystals have provided the greatest source of performance and cost improvement for PET scanners in recent years, in addition to image quality improvements, resolution and sensitivity gains. The performance improvement from Zecotek's patented LFS scintillation crystals allows for faster imaging times, requiring less radio-trace element to be injected into the patient and therefore allowing hospitals and other medical facilities to achieve a greater patient throughput.

High performance scintillation crystals are developed principally for OEM manufacturers of PET and PET-CT (positron emission tomography – computed tomography) scanners. A single PET-CT scanner can contain up to 50,000 individual crystals. Other applications are in micro-PET detectors used in drug research, and gamma cameras used for specific applications such as breast and prostate examinations. Additional non-medical applications include gamma ray detector systems for homeland security, geological surveying, materials analysis, high energy physics and nuclear stockpile monitoring.

Zecotek has successfully developed a new generation of silicon-based photon counters, designated the new generation of surface Micro-pixel Avalanche Photo Diodes (MAPD). The MAPD is targeted at replacing existing photo-detection devices, known as Photo-Multiplier Tubes (PMT's) used currently in PET and PET-CT scanners for medical imaging, as well as in wide industrial and research applications.

Zecotek's solid-state photon counters have been designed to offer significant performance and cost advantages over the current vacuum tube based PMT. Furthermore, MAPD's are insensitive to magnetic fields an important consideration when combining PET and MRI technologies. PMT based photo-detection devices are currently used in PET and PET-CT scanners and represent approximately one-third of the cost of each scanner. MAPD is significantly smaller than existing PMT's, cost less to produce and in tests have performed substantially better than PMT's. The market for MAPD includes components of medical inspection devices used in blood analysis and DNA sequencing. Additional non-medical applications include: gamma ray detectors for homeland security, environmental monitoring, industrial control systems, robotics, biomedical testing, navigation and guidance systems, laser radars and high energy physics.

In partnership with the University of Washington, the Company is developing a proprietary PET/MRI detector, which could lead to a new standard in medical imaging. The limiting factor of bringing the two imaging technologies together has been the sensitivity of the PMT's to the magnetic field generated by the MRI (Magnetic Resonance Imaging). By combining the patent-pending solid-state photo detectors which are insensitive to magnetic fields, with the patented LFS scintillation crystals, Zecotek may effectively combine PET and MRI technologies into a single device, representing a dramatic medical and technological breakthrough.

In partnership with the University of British Columbia (UBC), Zecotek is developing a proprietary, broadband light source that will drive a compact and low cost non-destructive optical imaging device. The Optical Coherence Tomography device could offer the clinicians, the ability to look at tissue microstructures with depth of few millimeters, thus allowing very early disease detections.

### **Medical Lasers**

Zecotek's medical laser program is targeted at meeting the needs in the medical and bio-tech sectors of: biomedical instrumentation, ophthalmology, dentistry, cardiovascular and infectious diseases. The increasing use of lasers for disease diagnostics and drug discovery plus the growth in patient-paid therapy for vision correction and aesthetic applications have been major contributors to the growth in the medical laser industry. The Company is developing the following technologies:

- **Solid-state lasers** for use in medical, scientific and industrial applications;
- **Bio-instrumentation lasers** for drug discovery and clinical diagnostics;
- **Fiber lasers** for medical, inspection and measurement applications;
- **Thin film lasers** for surgical and diagnostic applications in cardiology, ophthalmology and dermatology.

Zecotek's has developed a Rare earth Fine Oxide (RFO) crystal to replace the ubiquitous YAG crystal, which is used in approximately 60% of laser applications, ranging from medical lasers to high-power industrial laser systems. The Company's proprietary RFO crystal growth technology has been under development for the past three years and represents a substitute to YAG. The RFO crystal is targeted to provide improved performance with significant cost savings.

Zecotek's proprietary lasers may also have possible industrial applications including High Definition Laser displays (HDTV).

### **3D2D Display**

While there are a number of 3D screens and displays currently available today, none fully meet the key attributes required for true 3D display: multi-user, multi-view, real-time, high resolution viewing that is compatible with existing applications. Zecotek has successfully developed and demonstrated a compact, colour, 3D2D display prototype that offers multiple viewers with true volumetric visualization and exhibit depth and parallax over a wide viewing angle. The **3D2D display** provides a new level of user interface, not only in medical imaging but in a number of other significant markets: computer-aided design, product simulation, training, virtual reality systems, scientific modeling, video games, 3D TV, etc. Zecotek's proprietary 3D2D display system is expected to have wide applications in all of these markets.

### **Zecotek Product Summary**

- patented LFS scintillation material
- a new scintillation material for medical imaging to eventually serve as a successor material to the LFS;

- patent-pending solid-state photon counter;
- enabling technologies for combined PET-MRI detectors;
- a light source for optical coherence tomography, in development in conjunction with UBC.
- various solid-state and fiber laser technologies, including a solid-state laser for bio-instrumentation;
- a thin film waveguide micro laser technology, being currently in development jointly with UBC;
- the RFO crystal, aimed at substituting the present YAG crystal for various laser applications;
- a real time auto-stereoscopic 3D display.

## **Recent Developments**

### **Letter of Intent with Major Japanese Electronics Firm for 3D/2D Display Technology**

On March 26, 2007 Zecotek announced a letter of intent with a Japanese electronics major firm to complete development and manufacture Real-Time 3D/2D Display technology. The non-binding letter of intent calls for both parties to lay the groundwork for a strategic relationship whereby Zecotek and the major Japanese electronics firm would collaborate on an ongoing basis in the development, manufacture and commercialization of the 3D/2D Display. Under terms to be negotiated, the electronics firm would contribute investment, technical support, manufacturing expertise plus marketing and distribution channels. Under the letter of intent, the identity of the company remains confidential pending terms of an agreement.

### **Professor Sadygov Appointed to Lead Commercialization of Photo-Detector Product Line**

On March 6, 2007 Professor Zair Sadygov was appointed Chief Scientist in Zecotek's medical imaging division. Professor Sadygov is the inventor of the new generation of surface Micro-pixel Avalanche Photo Diodes (MAPD) and the founder of Dubna-Detectors Ltd., a research and development company working within the Institute of Nuclear Research in Dubna, Russia.

Professor Sadygov will lead the development and production of Zecotek's product line of solid-state photon counters including the newest generation device, known as the Micro-Channel MAPD (MC-MAPD). The variety in operational parameters of these solid-state photon counters offers the medical imaging industry a choice of detection design considerations, which is particularly important for PET (Positron Emission Tomography) scanners.

### **New-Generation Solid-State Photon Counters**

The Company has successfully developed a new generation of silicon based photon counters, designated the new generation of surface Micro-pixel Avalanche Photo Diodes (MAPD). Zecotek's solid-state photon counters have been designed to offer significant performance and cost advantages over existing photo-detection devices, known as Photo-Multiplier Tubes ("PMT"). Furthermore, MAPD's are insensitive to magnetic fields an important consideration when combining PET and MRI technologies. PMT's are currently used in Positron Emission Tomography (PET) scanners for medical imaging, as well as in wide industrial and research applications.

The MAPD element is a market-ready product. Manufacturing of the MAPD will be outsourced, with the support of the Government of Singapore, to one of Singapore's highly competitive semiconductor companies. This OEM manufacturer will complete the manufacturing process of arrays of MAPD elements targeted at the next generation of PET-CT machines and other applications.

### **Official Inauguration of Operational Headquarters in Singapore**

In March 2007 Zecotek officially opened its operational headquarters in Singapore with a ceremony that was attended by His Excellency Alan Virtue, High Commissioner of Canada to Singapore, senior officials of the Government of Singapore, and senior members of Singapore's business, scientific and financial communities.

Zecotek moved its operational headquarters to Singapore after completing a thorough evaluation of competing options. In addition to Singapore's excellent infrastructure, its large pool of highly trained research personnel and its world-class high-technology manufacturing sector, a key factor in it's the Company's decision was the support of the Government of Singapore's Economic Development Board ("EDB") who welcomed Zecotek as their first bio-photonics company. The EDB has approved in principle reimbursable grants of approximately 30% of total operational and capital costs.

## **Letter of Intent Signed with Russian-based Laser Manufacturers**

In February 2007 the Company's wholly owned subsidiary Zecotek Laser Systems Singapore Pte Ltd. signed two separate letters of intent with Inversion Fiber Co Ltd (Inversion) and Tekhnoscan JS Company (Tekhnoscan), two Russian-based laser manufacturers, to acquire exclusive rights to certain assets and expertise in consideration for minority interests in Zecotek Laser Systems Singapore. The combined assets bring together significant production, manufacturing and marketing expertise in the laser industry and will contribute immediately by adding unique product lines and global distribution. The addition of production and manufacturing expertise will accelerate market entry of Zecotek's line of laser crystal and laser system products which are in the final stages of commercial development including: diode-pumped solid state lasers and fiber lasers for use in the bio-instrumentation, dentistry, and ophthalmology industries.

## **Board and Management Changes**

In January 2007 Zecotek made changes to the composition of its Board of Directors bringing added independence and as recommended by its Corporate Governance Committee. Mr. Michel Coderre, a co-founder of the Company, has agreed to step down from the board and as an officer of ZMS. In addition, Mr. David Wynne has resigned from the board, but will remain COO of the Company's Singapore operations. Mr. Frank Ramsperger will take on the role as Chair of the Compensation Committee and the lead director in charge of administrative affairs of the board. Mr. Eric Sager will remain as a director and also will take on the role of Executive Vice President for Business Development and Corporate Affairs.

## **Non-Disclosure Agreement with GE Healthcare**

In November 2006 the Company announced that it had entered into a Non-Disclosure Agreement with GE Healthcare with respect to Zecotek's patented LFS scintillation material. The Agreement calls for Zecotek and its strategic partner Northrop Grumman to provide GE Healthcare with technical, performance and pricing information with respect to using Zecotek's patented LFS material in the crystal block design for GE Healthcare's PET-CT scanning devices.

Zecotek's new and proprietary Lutetium Fine Silicate ("LFS") scintillation crystal emits blue light which is a key attribute in the design of whole body positron emission tomography ("PET") scanners. The performance improvement from Zecotek's patented LFS scintillation crystals could allow for faster imaging times, requiring less radio-trace element to be injected into the patient and therefore allowing hospitals and other medical facilities to achieve a greater patient throughput.

## **3D2D Display Technology**

In November 2006 the Company announced that its 3D2D display has reached prototype demonstration stage. The first demonstration of its full-colour display took place in early November at the Company's new Singapore facilities to a delegation of senior engineers and executives of a Japanese electronics major. Demonstrations were also given to representatives of the Singapore Government.

The Company's Real-Time 3D2D Display System is a novel, proprietary display system for the visualization of images and data. Based on the auto stereoscopic principle, but with substantial patent pending innovation, it represents a new generation of 3D displays. Meeting the requirements of both mass market and professional use, it is particularly powerful when applied to the field of medical imaging. Its design provides for multi-user, multi-view, freedom of movement, high resolution in both 3D and 2D modes, superior image dynamic range in 2D mode, 2D and 3D simultaneous displays, common brightness, compatibility with existing applications and designed to be cost competitive. The Real-Time 3D2D Display System display is presently undergoing product engineering and large screen prototyping.

## **Lutetium Fine Silicate ("LFS") Scintillation Crystal**

### ***LFS Patent***

In November 2006 the Company was issued U.S. patent number 7,132,060 for the LFS scintillation material. The granting of the LFS patent is a significant technical validation of the LFS material and Zecotek's expertise in developing advanced crystal materials.

### ***Northrop Grumman Agreement***

In March 2006 the Company licensed its proprietary Lutetium Fine Silicate (“LFS”) scintillation crystal material to Northrop Grumman Corporation (NYSE:NOC) under a 20-year exclusive licensing agreement. Developed by Zecotek principally for medical imaging markets, the LFS crystal allows Northrop Grumman to expand its crystal product line in this growing market.

Northrop Grumman will promote, market, manufacture and distribute the LFS product worldwide through Synoptics, a business unit of the company’s Space Technology sector, based in Charlotte, N.C. Under the agreement, Zecotek receives a royalty of the gross selling price for each unit of licensed product delivered, sold or leased to a third party during the twenty year term of the agreement.

### **Optical Coherence Tomography Agreement with the University of British Columbia**

In August 2006 the Company entered into an agreement with the University of British Columbia (“UBC”) to jointly develop advanced light sources and optical systems for its future Optical Coherence Tomography (OCT) medical imaging products.

OCT is a non-invasive, in vivo, portable optical imaging technique which is used to create an image a few millimetres below the surface of human tissue, either internally with an endoscope or externally. The Company is collaborating with UBC’s world-class semiconductor light-source group, led by Professor Tom Tiedje. Combining the expertise of Professor Tiedje’s team with Zecotek’s core competency in lasers, fiber optics and optical systems, the collaboration anticipates significant innovation and radical performance improvements in OCT systems, including higher resolution, better depth of penetration and improved scan rate resulting in greatly improved diagnosis and patient outcomes.

### **PET-MRI Collaboration Agreement with University of Washington**

In July 2006 the Company entered into a Collaborative Research Agreement with the University of Washington to develop a proprietary PET-MRI detector as the core technology of a next generation medical imaging system. Zecotek’s new crystal materials, photo-detectors and advanced optical components design are key components to the successful fusion of PET and MRI into one machine, as the major barrier to a fusion of PET-MRI has been the strong magnetic fields of MRI which destroy the photo-detection capabilities of PMT’s in current PET devices.

Professor Thomas Lewellen of the University of Washington, considered a leading worldwide researcher in the field of high resolution PET system development, will lead the research project.

### **RFO Crystal**

On April 10, 2006 the Company announced the introduction of the Rare earth Fine Oxide (RFO) crystal, a significant technological breakthrough in the development of crystals for solid-state lasers.

Presently, the leading crystal used by laser manufacturers is the YAG crystal, which is used in approximately 60% of laser applications, ranging from medical lasers to high-power industrial laser systems. The Company’s proprietary RFO crystal growth technology which has been under development for the past three years is a viable substitute to YAG and is targeted to provide the higher performance that manufacturer’s desire along with significant cost savings.

The next phase in the RFO development is fine-tuning the mass-market manufacturing process, which is estimated to take 10-12 months. Concurrently, the Company will evaluate potential strategic alliances with industry leaders that will assist in the advancement to large-scale manufacturing.

## **Selected Annual Information**

The Company’s fiscal year end is July 31. The following is a summary of certain selected audited consolidated financial information for the Company’s three most recently completed fiscal years.

	Audited Year Ending July 31, 2006	Audited Year Ending July 31, 2005	Audited Year Ending July 31, 2004
Total revenues	\$ 44,153	\$ 4,110	\$ 0
Net loss for the year	\$ (5,734,665)	\$ (1,342,601)	\$ (84,045)
Earnings/loss per share	\$ (0.37)	\$ (0.13)	\$ (0.01)
Total assets	\$ 4,275,901	\$ 3,197,577	\$ 110,833
Long term debt	\$ 0	\$ 0	\$ 0
Share Capital	\$ 16,246,313	\$ 10,506,895	\$ 6,376,520
Number of Shares	34,692,741	15,033,341	6,151,841
Retained earnings (loss)	\$ (13,801,155)	\$ (7,778,490)	\$ (6,435,889)

### Summary Financial Information for the Eight Most Recently Completed Quarters

	January 31, 2007	October 31, 2006	July 31, 2006	April 30, 2006
Operating Accounts				
Net sales	Nil	Nil	Nil	Nil
Net loss	\$1,674,381	\$1,547,056	\$4,114,168	\$743,791
Balance Sheet Accounts				
Total Assets	\$3,881,408	\$2,931,039	\$4,275,901	\$2,529,782
Loss per share	\$0.048	\$0.044	\$0.095	\$0.045
	January 31, 2006	October 31, 2005	July 31, 2005	April 30, 2005
Operating Accounts				
Net sales	Nil	Nil	Nil	Nil
Net loss	\$474,415	\$402,291	\$753,950	\$324,518
Balance Sheet Accounts				
Total Assets	\$3,107,112	\$2,948,467	\$3,197,577	\$2,781,117
Loss per share	\$0.030	\$0.026	\$0.050	\$0.024

### Results of Operations for the Second Quarter Ended January 31, 2007 and 2006

The following discussion and analysis of the Company's financial condition and results of operations should be read in conjunction with the Company's annual audited financial statements and related notes.

For the quarter ended January 31, 2007, the Company's consolidated net loss from operations was \$1,647,381 (2006 - \$474,415). This increase is a result of the Company deciding to adopt a conservative position under Canadian GAAP and to expense all R&D costs of technologies under development until such time as that technology is revenue-making. In addition is the increased expense of having the Company's operations located in Singapore.

Analysis of some of the more significant expenses for the quarter ended January 31, 2007 is as follows:

**Research and Development** expenses were \$655,245 (2005 - \$276,705). All research and development costs have now been recorded as expenses and are no longer capitalized as in the prior year.

**Amortization** expense was \$34,629 (2006 - \$3,135). The Company purchased laboratory equipment, office furniture and equipment including computers to set up its new office in Singapore. The Company also incurred leasehold improvements in the Singapore office.

**Consulting and professional fees** were \$176,137 (2006 - \$41,860). Consulting and accounting fees were \$136,144 (2006 - \$41,860). Investor Relations were \$39,993 (2006 - nil). The Company signed a one year IR contract in March 2006 for \$7,500 per month plus disbursements. **Filing fees** were \$19,454 (2006 - \$10,578). **Legal fees** were \$50,460 (2006 - \$28,469).

**Rent and storage** expense was \$63,116 (2006 - \$29,210). The Company paid \$3,000 per month on a month-to-month lease for its head office location to December 31, 2006 as well as \$6,260 per month for office and research facilities at UBC. The head office was transferred to the UBC location as at January 1, 2007. In July 2006 ZMSS signed a lease for office rent in Singapore and paid CDN \$15,374 in the quarter. It also has a lease on a furnished company apartment to be used for relocating staff and traveling directors and a lease on a furnished residence for its CEO.

**Travel** was \$123,884 (2006 - \$17,675) for accommodations and travel to Vancouver by Russian scientists, for directors to attend Board meetings and travel to meet with potential investors.

**Office and miscellaneous** expenses were \$49,986 (2006 - \$3,062) for expenses incurred at the UBC and Singapore office/lab locations. This includes office supplies, telephone, postage, courier, filing fees and bank charges.

**Salaries and benefits** were \$145,047 (2006 - \$25,857).

**Stock-based compensation** expense of \$438,762 (2006 - \$39,471) At January 31, 2007, 3,053,000 options have vested at an average weighted exercise price of \$0.93. The estimated fair value of options granted to executive officers, directors, and employees and consultants since August 1, 2004 is amortized to expense over the vesting period of the stock options.

## **Financing**

On August 9, 2006, 8,000 common shares of the Company were issued upon exercise of stock options at \$0.75 per share, for gross proceeds of \$6,000.

On January 25, 2007, 200,000 common shares of the Company were issued upon exercise of stock options at \$0.70 per share, for gross proceeds of \$140,000.

## **Liquidity and Capital Resources**

The Company has suffered recurring losses from operations and currently does not yet have any revenue producing assets. Its ability to conduct operations, including the development of its new technology and the acquisition of additional technologies is dependent on its ability to raise funds as needed.

At January 31, 2007 the Company had \$2,987,347 (2006 - \$749,477) in cash and cash equivalents and a consolidated working capital of \$2,961,404 (2006 - \$712,491) for ongoing working expenses. During the quarter 200,000 options were exercised for gross proceeds of \$140,000.

There are currently 3,514,700 outstanding warrants exercisable at \$1.30 per share and 638,940 outstanding agents' options exercisable at \$.90 per option, all exercisable for a period of 18 months.

Exercisable outstanding options represent a total of 3,053,000 common shares issuable at January 31, 2007 and would provide proceeds of \$3,361,975 to the Company if all the vested options were exercised in full. The exercise of these options is completely at the discretion of the holders and the Company has no indication that any of these options will be exercised.

The Company closed a non-brokered private placement for gross proceeds of \$3,500,000 on February 19, 2007. \$2,000,000 was received during the period and recorded as subscription receivable. Under the terms of the private placement, 3,043,478 common shares were issued at \$1.15 per share. The Company paid a finder's fee equal to 8% of the gross proceeds of the sale of the shares and issued non-transferable finder's warrants to purchase shares equal in number to 7% of the shares sold under the private placement.

## Lease Agreements

The Company has a lease agreement for the rental of office space at its UBC location. The lease expires February 23, 2008. The future minimum lease obligations are as follows:

2007	\$ 26,274
2008	26,274
Total	\$ 52,548

In June 2006 ZMSS signed a lease agreement in Singapore for rental of 2,778 square feet of office space. The lease term is from January 1, 2007 to December 31, 2009 for gross monthly rent of SGD \$22,512 or approximately CDN \$16,125.

2007	\$ 135,070
2008	270,138
2009	270,138
2010	112,558
Total	SGD \$ 787,904
Or Approximately	CDN \$ 564,380

ZMSS signed a lease agreement for rental of a furnished apartment for its employees in Singapore. The lease term is from July 5, 2006 to June 30, 2008 for a gross monthly rent of SGD \$3,300 or approximately CDN \$2,360. Employees will stay at the apartment until they are able to secure permanent lodging as this is more cost effective than having them stay at a hotel during their transition. The apartment will also be used by scientists traveling to Singapore to work on research and development and by directors and officers traveling to Singapore for meetings.

2007	\$ 19,800
2008	36,300
Total	SGD\$ 56,100
Or Approximately	CDN \$ 40,184

Effective August 22, 2006, Zecotek Medical Systems Singapore Pte. Ltd. signed a lease agreement for a furnished residence for its CEO in Singapore. Monthly rent of SGD \$12,000 (approximately CDN \$8,500) is to be paid from September 1, 2006 to August 31, 2008, totalling SGD \$288,000 (approximately CDN \$204,600).

2007	\$ 72,000
2008	144,000
2009	12,000
Total	SGD \$228,000
Or Approximately	CDN \$171,000

## Share Capital

Authorized: Unlimited

Set out below is the outstanding share data of the Company as at January 31, 2007. For additional detail, see Note 9 to the audited financial statements for July 31, 2006.

As at January 31, 2007	Number outstanding
Common Shares	34,900,741
Options to Purchase Common Shares	5,189,000
Agent's Options to Purchase Common Shares and warrants	638,940
Warrants to Purchase Common Shares	3,514,700

Escrow shares:

At January 31, 2007 a total of 10,820,003 shares were held in escrow, their release subject to a predetermined time schedule.

## **Related Party Transactions**

### **Asset Purchase**

On December 31, 2004, the Company's subsidiary, Zecotek Crystals Inc., completed its Asset Purchase Agreement with Zecotek Holdings Inc. whereby Holdings received \$80,000 in cash and 2,400,000 shares of the Company in payment. Dr. A. Faouzi Zerrouk, is the founder and majority shareholder of Holdings.

Subsequent to the completion of the asset acquisition, Dr. Zerrouk was appointed Chairman, President, CEO and Director of the Company. Directly and indirectly Dr. Zerrouk controls 2,410,000 common shares or 6.95% of the issued and outstanding common shares of the Company. In addition, he personally holds 560,000 options at \$0.50 per share that expire on December 31, 2009 and an additional 60,000 options exercisable at \$0.70 that expire on January 18, 2010.

On May 12, 2006 the Company completed an Asset Purchase Agreement with Zecotek Holdings Singapore Pte. Ltd. ("Holdings Singapore") pursuant to which the Company acquired all the bio-photonic technologies owned by Holdings Singapore. To acquire the various bio-photonic technologies, the Company paid to Holdings Singapore \$338,000, issued 11,750,000 common shares of the Company and issued 10% of the Class A preferred shares of any subsidiary of the Company into which the technologies might be transferred at a later stage. The Company's CEO is the majority shareholder of Holdings Singapore and through this company, directly and indirectly controls 11,750,000 common shares or 33.86% of the issued and outstanding common shares of the Company. In addition, he received 900,000 options exercisable at \$1.76 per share that expire on May 12, 2011.

### **Services of CEO**

Total fees paid to the CEO for the quarter were \$99,087 (2006 - \$45,000); for research and development of \$66,058 (2005 - \$30,000) and consulting fees of \$33,029 (2005 - \$15,000).

## **Forward Looking Statements**

Certain statements contained herein that are not historical facts are forward-looking statements that involve risks and uncertainties. There can be no assurance that such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements.

## **Audit Committee**

In compliance with the TSX Venture Exchange Policy 3.1 "Directors, Officers and Corporate Governance" section 10.1, the Audit Committee is comprised of 3 independent members, Erich Sager of Zurich, Switzerland, Frank Ramsperger and Dr. Ahmad Magad of Singapore. Mr. Sager is the Chairman of the Audit Committee.

Mr. Sager has many years experience in the private banking sector in Switzerland and serves on several Boards as Director. Dr. Magad, CPA, MBA, Doctorate in Business Administration, is a director of several Singapore companies and a Member of Parliament for Singapore's electoral area of Pasir Ris-Punggol. The Audit Committee will serve until the next Annual General Meeting at which time the new Board of Directors will appoint or re-appoint the Audit Committee.

## **Additional Information**

Additional information relating to the Company, including the Annual Information Form and its audited year end financial statements is available on SEDAR at [www.sedar.com](http://www.sedar.com). Copies of this information are available either on SEDAR or upon request to the Secretary of the Company.