

# OCE always knew there was a formula for success. We've been proving it for the last twenty years.

### The first variable in this equation is necessity.

Ontario needs to be innovative to compete at the highest levels in the global arena. This necessity is also purely practical: scientific researchers need industry partners and vice versa to create and market the innovations that can drive our economic prosperity.

The next variable is our people. Ontario is home to a vibrant community of scientists working in every kind of context — fully capable of answering the call to innovation. They find their counterparts in the business realm: entrepreneurs, financial investors, private industry and governmental bodies.

The tertiary element is OCE itself: the connectors who bring everything together in one room. We help the players make the decisive

leap into the marketplace — with the benefit of our support, experience, guidance, partnerships, and network.

need industry partners and vice versa to create and market the innovations that can drive our economic prosperity.

Combine all the variables to put our formula in action: applied at critical points in the research to market cycle to help brilliant ideas take root and fly. We engage across a spectra of scientific endeavours through five sector-specific centres — to a vibrant community of scientists working in

The results have been spectacular. The past year marks major transformations and substantive progress on a myriad of fronts as detailed in this report. Above all, OCE in its twentieth year, continues to reinvent the business of innovation. Doing everything in our power to make Ontario the place where next happens.

- Centre of Excellence for Photonics
- Centre of Excellence for Materials and Manufacturing
- Centre of Excellence for Earth and Environmental Technologies
- Centre of Excellence for Communications and Information Technology
  - Centre of Excellence for Energy

**OCE** invested

\$16,428,879

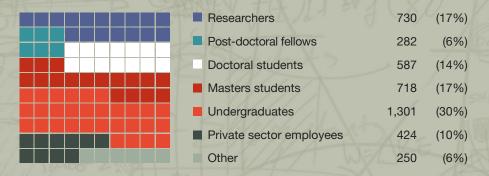
in research projects last year

OCE supported projects

OCE connected researchers with 637 companies to develop solutions to industry challenges

## Investing in Innovators

Over 4,000 researchers and students were involved in OCE supported research programs



START-UPS

New leading-edge companies created through OCE supported research OCE's 95 start-ups attracted an additional

85,358,452

in carry-on investment from capital markets last year

\$33,586,778

Investment leveraged from the following sources last year:

\$2,616,402 Government partners

\$30,970,376

**Moving Minds to** the Marketplace

OCE helped move

researchers to positions outside of their academic institutions



Canadian private sector in Ontario 754 (40%)

Canadian private sector outside Ontario 231 (12%)

Universities and government 328 (18%) in Ontario

Universities and government outside Ontario 157 (8%)

Other positions 408 (22%) 36,810

Companies and individuals that connected with OCE

Universities / Colleges / Research Hospitals engaged in OCE

1,066

supported by OCE

897

Patent applications submitted with support from OCE

from OCE

86

Active licences that were supported by OCE

Over the past year, OCE has been at the forefront of Ontario's increasing focus on innovation. With the significant challenges faced by many of Ontario's key industry sectors from global competition and a growing awareness that environmental issues will force us to change how we do things, it is generally recognized that innovation holds the key to maintaining our economy and ultimately our standard of living. As a result, the work and expertise of OCE have assumed a new importance. This is now reflected in the expanded scope of activities undertaken by OCE at the behest of the Ontario Government.

In May, we celebrated the 20th anniversary of the founding of the Ontario Centres of Excellence at Discovery 2007. It is a great testament to the excellent work done by our staff and our academic and business partners that OCE has not just survived but thrived through four changes of government and massive changes in technology and in the economy. The past 18 months have seen an important evolution in OCE as we have moved into new projects and approaches while maintainingthe vitally important core programs in each of our centres.

The Ministry of Research and Innovation asked OCE and MaRS to jointly deliver its \$46 million Ontario Market Readiness Program. OCE is primarily responsible for administering the \$27.5 million Investment Accelerator Fund created under this new initiative. The fund is now operational to provide seed capital for new innovative ventures across the province.

OCE concluded a contract with the Ministry of Energy early this year to manage a \$4 million fund which now is supporting research activities in Atikokan to investigate the potential role of sustainable biomass in power generation.

The last Provincial Budget provided \$15 million to OCE to fund innovative development in alternative energy. Our Centre for Energy under the direction of a special committee of the Board of Directors is moving ahead rapidly with a process to identify projects which could have a transformative impact on Ontario's energy sector.

The Mind to Market breakfast series has been launched with a very distinguished group of speakers to provide a forum for OCE and its partners to reach out to business, academia and the broader community. The breakfast series has been both well-attended and well-received and has provided a wonderful venue to showcase successful innovation in Ontario.

I could go on, but the above indicates the rapid evolution of OCE's activities over the past year.

None of this intensified level of activity would be possible without the skill and determination of our President and CEO, Mark Romoff. Mark and the OCE team have done a first rate job in delivering on our expanded range of programs. I am pleased that we have now been able to fill all of OCE's management positions with very qualified people after a year of considerable flux.

I would like to thank the members of our Board of Directors for their excellent contributions. OCE is blessed with a reliable team of Directors who provide exceptional counsel and guidance to our organization.

Finally, I wish to thank the Government of Ontario for the confidence it has shown in OCE and for the other financial assistance it has provided to enable us to achieve our mandate. OCE takes seriously our obligation to the people of Ontario to ensure that our work will enhance the economic, social and environmental well-being of the province.

David McFadden, Chair, Board of Directors

M Taddyd

This last year marks an auspicious milestone as the Ontario Centres of Excellence (OCE) celebrates twenty years of formulating innovation throughout the province. Each year builds upon the last with ever-increasing opportunities for commercialization and growth. The news is good across the board as our partnerships between research and industry continue to strengthen the global competitiveness of Ontario across key sectors vital to our economy.

For proof of this trend, look no further than the strong leverage our research investments made last year. OCE's \$16.4 million research investment resulted in \$33.6 million in further investment from industry and government partners - an impressive 200% leverage and an extraordinary wave of momentum for R&D in the province. Furthermore, OCE participated in the launch of 19 new start-up companies - bringing our total to 95, who have collectively attracted an additional \$85 million of carry-on investment within the last year alone. In addition, we are especially proud of our research partners, En-Hui Yang, University of Waterloo, Andreas Mandelis, University of Toronto, and Savvas Chamberlain, Dalsa Corporation, all winners at the inaugural 2007 Premier's Innovation Awards.

We are pleased to report upon the successful evolution of OCE itself – with the full implementation of our plans to streamline and integrate programs and processes. Our goals remain constant: to strengthen the connections between Ontario researchers, industry, entrepreneurs and financiers; to identify and grow the next generation of innovators and business leaders; and to advance the culture of innovation in the province.

The new iteration of OCE also accentuates our capability to seed and promote technology convergence projects on the far edge of innovation - on pressing global issues like sustainability, the environment and health care. And in an era of increasingly convergent technologies, our new model allows us greater flexibility to work on

joint-centre projects. We can now apply our combined expertise to address innovations that fuse technologies in new unprecedented ways.

We continue to expand our network and build relationships with leaders in research, industry, government and with other fourth pillar agencies, such as the Innovation Synergy Centre in Markham and the Accelerator Centre in Waterloo. OCE is also creating new partnerships that focus development on our newly emerging leaders and entrepreneurs with organizations like Let's Talk Science, Shad Valley and Impact.

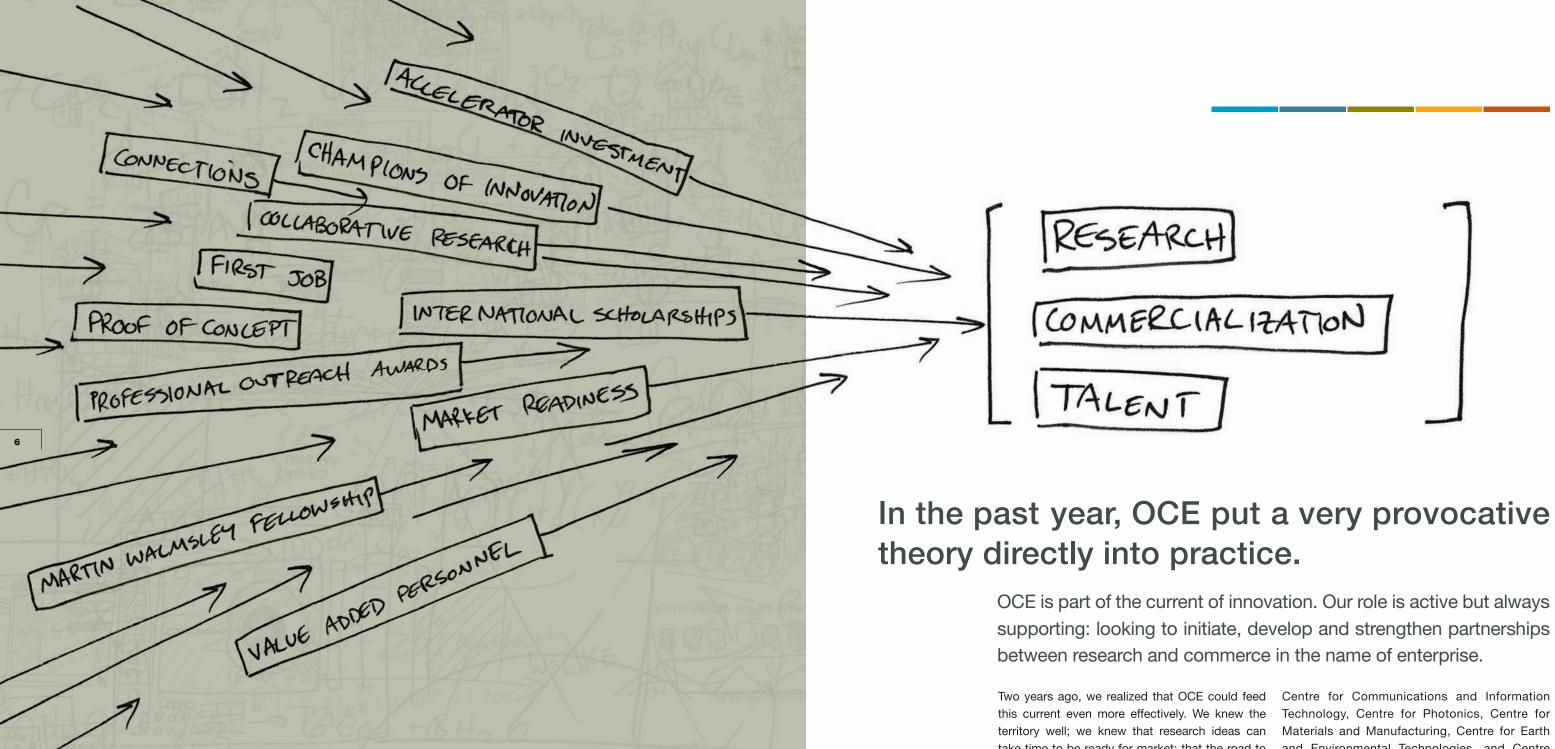


OCE continues to earn international recognition as a proven formula to commercialize innovation. This past year, we welcomed foreign representatives from Europe, Asia, Latin America, the Middle East and the United States and entered into new collaborations with organizations in Catalonia, Spain in photonics, and Israel in health technologies, as well as exploring future partnerships in both India

Our Chairman, David McFadden has outlined an impressive slate of developments which include both the Investment Accelerator Fund. newly established by the Ministry of Research and Innovation as well as major new contracts in motion with the Ministry of Energy. Given such powerful support, OCE stands ready to apply our formula for innovation on a scale to equal the immensity of these opportunities before us. Like never before, we are on target with the exact equation to make Ontario the place where

Mut-Konoff

Mark Romoff, President and CEO



take time to be ready for market; that the road to commercialization calls for uncommon expertise. We knew that every scientific playground warrants its own focus whether it be energy, the environment, manufacturing or information technology.

Our solution was to change the way we work from within by effectively streamlining and integrating our programs into three core areas: Research, **Commercialization,** and **Talent**. This fundamental shift in strategy is now the operating system in place for each of our five centres: OCE's in Ontario and beyond.

and Environmental Technologies, and Centre for Energy.

This past year, we implemented the theory across our entire OCE organization. And we can already see new sets of possibility falling into place. Our new programs and platform are fortified by the breadth of our expanding networks and the depth of our partnerships. Connected to what matters from new media to life sciences to clean technology we are ideally positioned to help the future unfold

Centre of Excellence for Materials and Manufacturing

Quantum Dental Technologies

INPLASITY
MOVAMED EEAM

PHID
DETECTOR

THERMAL
WHUES

DENTAR

TO DESTRUCT

TO DE

A dental revolution gleams on the horizon thanks to the new technology of Thermophotonics. OCE-assisted research conducted by University of Toronto professor, Andreas Mandelis and Dr. Stephen Abrams uses pulses of laser light to detect demineralization in the tooth before it can become a cavity. A prototype is now in the works for Quantum Dental Technologies with help from OCE.

Centre of Excellence for Earth and Environmental Technologies

Cleanfield Energy Corporation



The answer to cleaner alternative energy is blowing in the wind; Cleanfield Energy Corporation is working with McMaster University in an OCE-supported research collaboration to develop and market a new vertical-axis wind turbine to provide homeowners and businesses with a natural source of clean, reliable energy and utility bill savings.

OCE invested \$16./

\$16.4 million in research projects.

\$33.6 million from partners in industry and government.

The OCE Research Program offers support to help commercially relevant research projects find a warm welcome with investors and industry through the following initiatives:

Interact activates working relationships between the worlds of academia and industry. We introduce partners to expedite innovative R&D. Last year, OCE was able to make introductions for 76 ventures like start-up company Endrellia, to the Carleton University School of Industrial Design, to create a practical user package for a novel personal electronic communications device.

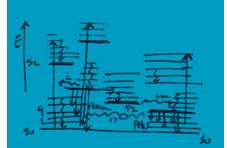
**Proof of Concept** directs investment support in short-term projects of three to twelve months. For a company like CSRplus Vermicast Industries, it means proof of concept support for their project that uses earthworms to convert waste into organic supplements for use in organic crop production.

**Champions of Innovation** focuses on the potential of disruptive or transformative technologies and the formation of new start-up ventures like Distil Interactive, now making a name for itself in the elite Ottawa high-tech community. Last year, OCE supported 27 such ventures.

Collaborative Research provides a powerful mechanism to encourage research partnerships between industry and academia with an emphasis on growing ideas into income – with over 243 collaborations developed last year. One of the standouts in an exceptional year is BTI Photonic Systems and Queen's University, who evolved far beyond the research collaboration stage with the BTI Netstender platform to become co-recipients of this year's Mind to Market Award.

Centre of Excellence for Photonics

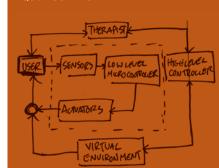
**Pharos Life Corporation** 



A brilliant new therapy to treat periodontal diseases using photodynamics has come to light with OCE's support. The combined research efforts of University of Toronto, the University Health Network and industry partner EFOS Inc. have resulted in a non-invasive treatment that uses light-activated drugs to target infected cells. Research proved strong efficacy and the result is Pharos Life, a new Ontario company ready to go.

Centre of Excellence for Communications and Information Technology

Quanser Inc.



Quanser Inc. is developing advanced robotic arms designed to provide sensory feedback to help stroke patients recover the use and feeling of their arms. OCE's support for early-stage commercial development provided Quanser's team with the time and resources to explore vital new applications for the technology in rehabilitation.

Centre of Excellence for Materials and Manufacturing

Bioplastics



Sparking innovation at the University of Waterloo, Dr. Leonard Simon incorporates soybean, wheat, barley, oats and corn into materials to replace oil and mineral based-plastics for automotive parts. Called bioplastics, these revolutionary resins and composites will drive lower costs, improve part performance and allow a vital Ontario industry to shrink its environmental footprint.

The OCE Commercialization Program initia-

tives serve to help researchers and inno-

vative technologies evolve into successful

Market Readiness supports the development

of real world applications for new technologies

with 54 such investments last year receiving OCE

support. The OCE team helps to successfully

navigate the next stage of commercialization and

the transfer to either a new or an existing company.

Accelerator works to speed the development

of new companies looking to bring academic

research to the marketplace. Investing up to

\$250,000 in each company, OCE last year helped

launch five new companies. The capital invested

business enterprises.

## Formulating the strategies to advance research to market.

**COMMERCIALIZATION** 

The OCE Commercialization Program martials its resources to accelerate technologies from the research phase to the commercial stage. With a mission to bridge the innovation gap, the OCE Commercialization team brings a highly sophisticated set of credentials and expertise to link and partner people, companies and backers from an extensive network of academic, industrial and investment contacts.

Centre of Excellence for Materials and Manufacturing

Strike Face Technology Inc.

Spurred by early OCE investment, Strike Face Technology Inc. of Waterloo developed a lightweight body armour system capable of withstanding armour-piercing bullets. In 2006, Christian Kaufmann, President, was awarded The Martin Walmsley Fellowship by OCE providing the support to refine the technology and market to military and police customers in markets around the world.

Centre of Excellence for Communications and Information Technology

Sketch2

Sketch2 technology revolutionizes computer automated drafting by enabling architects and interior designers to create 3D designs complete with furniture, fixtures, finishes and all costing, through links to relevant supplier interfaces. After an initial OCE investment of \$250,000, Sketch2 is closing on their next round of funding. Major international industry vendors see the writing on the wall and are expressing strong interest.

OCE supported

### 86 licenses currently in force.

OCE investments resulted in 19 new Ontario start-ups

in the last year alone.

There are now 95 companies who got their start with OCE support.

**Environmental Technologies** 

Centre of Excellence for Earth and



Good things are growing in Guelph as Dr. Alan Darlington of Air Quality Solutions applies his living plant bio-filtration systems to an industrial context with Toyota Canada. Dr. Darlington is preparing a Market Readiness plan for a pilot project to test bio-filtration in reducing smells and fumes in automotive paint shops.

Centre of Excellence for Energy



Electricity is 100 years old, but still potential. OCE entered into a two-Power Authority (OPA) to help spark manage high potential, pre-comrange of emerging energy technologies.

helps companies like high-tech start-up Distil Interactive, reach the point where they can attract further investments from financial investors and venture capitalists.

**Martin Walmsley Fellowship for Technological** Entrepreneurship is awarded each year to an academic innovator seeking to transfer technology, developed with OCE support, into a full-fledged business venture - like this year's success story, Christian Kaufmann of Strike Face Technology. Awarding \$50,000 per year for up to two years, the concept definitely works: Each of the ten recipients of the Martin Walmsley Fellowship and the company they created are all flourishing as successful businesses today.

> Centre of Excellence for Communications and Information Technology

### **Distil Interactive**



Now a leading developer of new media platforms, Ottawa's Distil Interactive first breakthrough stems from OCE-supported collaborations with the University of Ottawa. On the strength of those results, OCE followed up with an Accelerator Investment to help Distil raise its game - resulting in an additional \$2.2 million in capital investment in 2007.

### Leading minds to engage the frontiers.

The OCE Talent Program fosters the next generation of Ontario innovators and entrepreneurs. Whether providing opportunities for students to learn on the job, widening the international horizons of gifted future researchers, or helping to sharpen the business skills they will need to bring their work to the marketplace, the OCE approach is designed to inform, encourage, and inspire.

985 individuals

on to find excellent positions within industry.

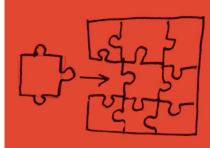
Centre of Excellence for Earth and

**Environmental Technologies** 



Each year, OCE sponsors a gifted Ontario science graduate to attend the summer session at the International Space University (ISU). This year's recipient, Jonathan Liberda from McMaster University, joined an international student body at the ISU sessions in China to see how life science problems are handled in the depths of space.

Value Added Personnel



Recognizing that students needed to enhance their business skills and learn what it takes to get an idea from the lab to the marketplace. OCE developed the Value Added Personnel initiative to help OCE funded graduate students build a key competitive advantage. 2007 marks the first wave of VAP graduates ready to take their ideas to market armed with essential business fundamentals.



The out of this world success of OCE-sponsored Tomatosphere: "Seeds from Space" continues. Not only has the science program won the fascination of over half a million students in 9,200 classrooms across Canada, Tomatosphere also won the 2007 Alouette Award from the Canadian Aeronautics and Space Institute for outstanding contribution to advancement in Canadian space technology.

The OCE Talent Program initiatives help every stage of their careers.

**Connections** offers a formative opportunity for undergraduate students to conduct commercially relevant research - it also creates a platform for OCE to initiate and support collaborations between students and private industry with student ventures like WaterlooSPEED.

First Job moves leading-edge academic talent to industry. Young graduates acquire precious experience in a real world context while employers receive the benefit of enthusiastic researchers with an infusion of energy, ideas and academic expertise.

**Professional Outreach Awards** allow students to attend international events to present their

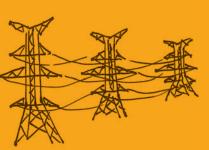
research results to peers and expand professional prepare our most talented people to excel at horizons. In 2006/2007 48 students participated in conferences in places as diverse as Australia, Brazil, China, France, Germany, Japan, Mexico, and Russia.

> International Scholarships enable students from OCE-funded programs to learn from the best the world has to offer. OCE provides financial support for students like Jonathan Liberda to study with global experts in international programs like the International Space University.

> Value Added Personnel is a customized program of OCE subsidized courses that equips recent graduates like Reza Chaji, PhD candidate at the University of Waterloo, with the knowledge they need to compete at the highest levels of business.

Centre of Excellence for Energy

**Durham Strategic Energy Alliance** 



OCE stepped in with the right talent. OCE's First Job Internship program Wheatle to work for the DSEA. With Centre of Excellence for Materials and Manufacturing

WaterlooSPEED



OCE's Connections program helped Systems Design Engineering graduates from The University of Waterloo to accelerate a brilliant idea. OCE connected the students' venture, WaterlooSPEED, with research partners National Instruments and Drivven to develop a new software platform that dramatically improves automotive engine performance and fuel efficiency.

Centre of Excellence for Earth and **Environmental Technologies** 

SRI Petro Chemical

Jniversity of Guelph and SRI Petro Chemical joined forces in an OCEsponsored partnership to develop a superior growing medium for hydroponic greenhouses. OCE's First Job Fellowship enabled SRI to hire Guelph graduate student and field scientist, Jeff Huber, to provide expert customer support and document case studies to help make inroads into the huge European market.

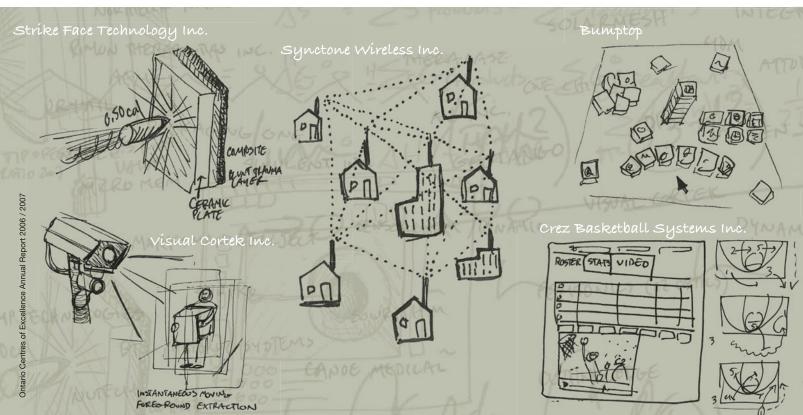
## 19 start-ups. Now cleared for takeoff.

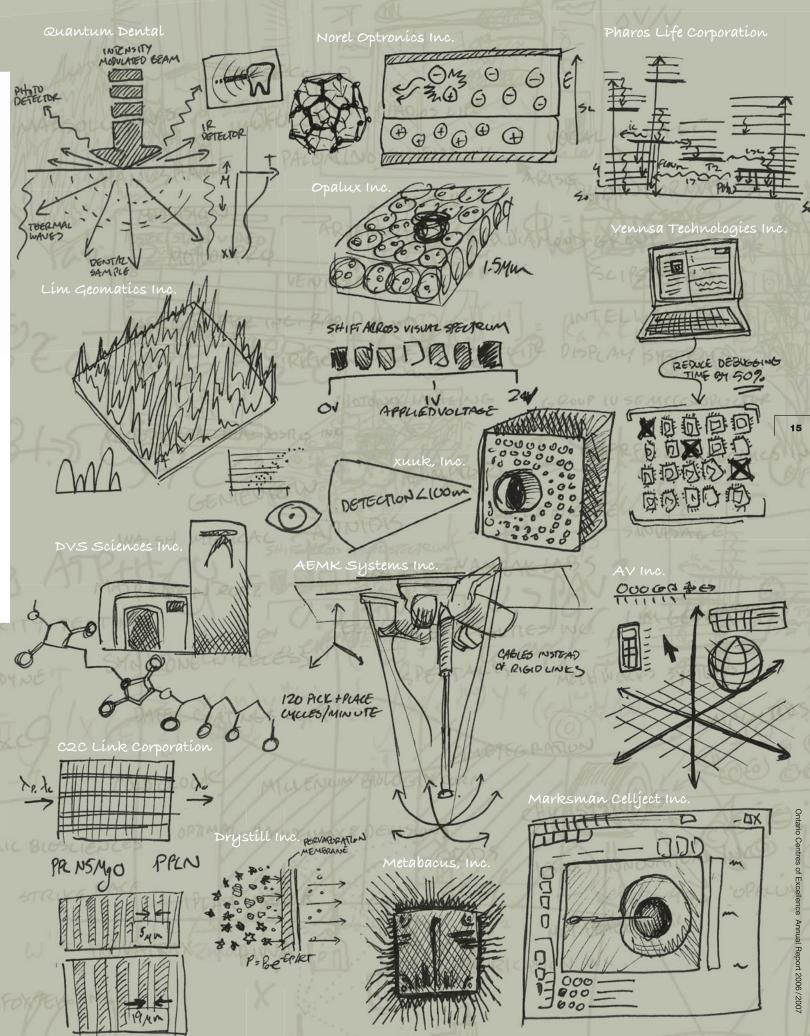
Strike Face Technology Bumptop Visual Cortek Drystill Synctone Wireless Quantum Dental Norel Optronics Crez Basketball Systems Pharos Life Corporation Opalux Vennsa Technologies Lim Geomatics **DVS Sciences** C2C Link xuuk AV Inc. Marksman Cellject Metabacus

**AEMK Systems** 

OCE is thrilled to have helped launch 19 leading-edge, start-up companies this last year – bringing our all-time total to 95. These start-ups attracted over \$85 million in carry-on investment this year from a clearly motivated investment community. Witness the OCE formula in action: support researchers with a brilliant innovation to form a company, which can then elicit outside investment to speed that innovation to market.

Delivering every kind of innovation from health care to photonics and IT, our new crop of start-ups come from across the province: Hamilton, Cambridge, Toronto, Mississauga, Thunder Bay, Kingston, Waterloo, and Ottawa. What's more – our 19 start-ups have already created over 55 new jobs with all the right stuff to help Ontario's economy take flight.







# Advancing our formula through the strength of our partnerships.

Partnership is the guiding principle behind the OCE formula. Whenever we partner with other organizations, it creates a fresh opportunity to leverage our expertise towards engaging with new technologies, channels and frontiers. By pooling our collective resources, we broaden our spheres of influence to even greater degrees - which in turn creates the possibility for yet more collaborations and more growth.























### The past year has resulted in a host of promising new partnerships set into motion:

announced a \$46 million Market Readiness Program which links OCE and MaRS as the joint deliverers of the program. OCE is principally responsible for administering the \$27.5 million Investment Accelerator Fund (IAF) which represents a tremendous infusion for early-stage high-potential Ontario companies, while MaRS leads the Business Mentorship and Entrepreneurship Program (BMEP), designed to deliver the management skills entrepreneurs need to take their high-tech product or service to market.

OCE's experience with the environmental sector is enabling us to build partnerships towards progressive solutions. Last year, we partnered with Precarn Incorporated and the Ontario Centre for Environmental Technology Advancement (OCETA) to fund R&D projects exploring hot-button environmental issues with collaborations linking company partners and academia to customer end-users.

With a focus to expand our research and commercialization expertise into the all-important energy sector, OCE entered into a two-year, \$1 million partnership with the Ontario Power Authority (OPA) to support innovative energy R&D in Ontario. Seven projects have been approved which include innovations in wind turbines, biofuel utilization, efficient cooling and lighting, electricity system operations, and more.

OCE is also creating new partnerships in the hightech sector to keep our fingers on the pulse of new commercial potential. For just that reason, OCE teamed up with the Accelerator Centre in

Waterloo last year with a common goal to expand the mentoring and training opportunities for young firms and support an inventory of new In July 2006, the Ministry of Research and Innovation technologies in development at local research institutions. In a similar vein, OCE is partnering with the Innovation Synergy Centre in Markham (ISCM) to identify collaborative R&D projects for marketable technologies as well as support strong seed-financing opportunities.

> Health care is a huge growth area ripe for innovation. OCE entered into a three-way collaboration linking the Health Technology Exchange (HTX), and the National Research Council Industrial Research Assistance Program (IRAP) to stimulate growth in Ontario's medical and assistive technologies industry. The partnership strengthens Ontario's leadership position in this sector, improving quality of life while reducing economic pressures on the province's public health care system.

> The partnership principle also enables OCE to apply its proven formula to explore entirely new markets of growth. Recent trade missions to China and India have shown strong potential while a new photonics research collaboration now links OCE to the Institute of Photonic Sciences (ICFO) in Catalonia, Spain. A new partnership with Israel sees OCE and The Health Technology Exchange joining with the Canada-Israel Industrial Research and Development Foundation (CIIRDF) to drive advances in our respective health care delivery systems. This trend to extend our partnerships onto an international playing field underscores OCE's ability to tap into fresh markets and access a wider world of opportunities - yet another part of our master strategy to make Ontario the place where next happens.



# **DISCOVER**

### Channeling the breadth of the OCE network.

OCE continues to build upon our role as the connectors of innovation in Ontario as we host and sponsor a multitude of events from the Mind to Market breakfast series to the annual Discovery conference. These events bring together thousands of people from the private sector, academia, and government - all under our banner of commercializing innovation. We are also a constant presence and participant in over one hundred other events a year throughout the province - with each of our five centres ever alert to look and listen for the people and places where next happens.

# MINDTOMARKET BREAKFASTSERIES

This past year, OCE successfully initiated the Mind to Market breakfast series - designed to provide an exciting glimpse of "what's next" in Ontario and to introduce our brand of innovation directly to new potential partners in the business community. Each event in the series presented a leader in a particular aspect of innovation, speaking to capacity gatherings with attendees hailing from academia, industry, the investment community and government.

The series launched with a pair of high-flying speakers, former astronaut Dr. Marc Garneau and



Dr. Marc Garneau



Dr. Robert Zee

Dr. Robert Zee, Managing Director, Space Flight Laboratory of University of Toronto Institute for Aerospace Studies, who respectively explored the connections between space travel and terrestrial innovation. The next session featured Dr. Robert Bell, President and CEO of the University Health Network (UHN), to discuss the economic and social imperatives of health care innovation in Ontario. We were also privileged to hear from David Johnston, President, University of Waterloo, who delivered a timely synopsis on how smart business leaders are successfully partnering with academia to define the innovation curve.



Dr. Robert S. Bell. MD



Prof. David L. Johnston

### In only its second year, the annual Discovery conference has evolved to become the single largest innovation event in Canada.

The conference attracted a sold-out capacity crowd of scientists, academics, investors, and governmental representatives. The event featured

provocative keynote speakers like futurist Ray Kurzweil and next-generation thinker and strategist, Dr. Richard Florida, as well as stimulating panel discussions, and 100,000 square feet of enterprising ideas in both research and business.



The Hon. Dalton McGuinty Premier of Ontario and Minister of Research and Innovation



Student Poster Competition Mark Romoff, Renée Cloutier, Yigun Zhao, Luke McKinney



Dr. Richard Florida Hirst Professor of Public Policy, George Mason University

### MINDTOMARKETAWARD

The 2007 OCE Mind to Market Award proved to be a high point of the conference. The award honours the most innovative scientific research collaborations in Ontario resulting in commercial success. The sheer quality of this year's entries resulted in a tie that reflected the diversity of Ontario's excellence in innovation. Five outstanding nominees were judged by a blue-ribbon panel, chaired by Suzanne Fortier, with a set of criteria evaluating respective levels of innovation, collaboration, commercialization and the outright "WOW" factor.

2007 Mind to Market Award Judging Panel

**Dr. Suzanne Fortier** Natural Sciences and Engineering Research Council

**Hon. Perrin Beatty** Canadian Manufacturers and Exporters

**Dr. John Challis** Ontario Council of University Researchers **Dr. Anne Golden** The Conference Board of Canada

**Mark Romoff** Ontario Centres of Excellence

**Deborah Rosser** Canadian Business Magazin

**Dr. Anita Sands RBC Royal Bank** 

The richly deserving co-recipients for this year's competition were: BTI Photonic Systems Inc. in partnership with Queen's University and SRI Petro **Chemical Inc.** working with **Guelph University.** BTI Photonics was recognized for its Netstender platform: the world's smallest operating platform designed to expand and accelerate broadband services at the network edge. SRI was awarded on the strength of its Enviro-Grow System (EGS): a new hydroponic growth medium with the potential to revolutionize Ontario's \$3 billion greenhouse industry and beyond.



2007 Mind to Market Award Recipients





Financial Statements of

## Ontario Centres of Excellence Inc.

Year ended March 31, 2007

June 21, 2007

### **Auditors' Report**

To the Members of **Ontario Centres of Excellence Inc.** 

We have audited the balance sheet of Ontario Centres of Excellence Inc. as at March 31, 2007 and the statements of operations, changes in fund balances and cash flows for the year then ended. These financial statements are the responsibility of the organization's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the organization as at March 31, 2007 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

The prior year's financial statements were reported on by another firm of chartered accountants without qualification in their report dated June 30, 2006.

Pricewaterhouse Coopers LLP

**Chartered Accountants, Licensed Public Accountants** 

PricewaterhouseCoopers refers to the Canadian firm of PricewaterhouseCoopers LLP and the other member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.

Ontario Centres of Excellence Inc.

### **Balance Sheet**

As at March 31, 2007

	2007 \$	2006
Assets	•	•
Current assets		
Cash and cash equivalents	27,525,595	10,381,228
Funds held in trust Accounts receivable	- 1,437,536	221,76 <sup>-</sup> 992,533
Grants receivable (note 2)	9,941,340	11,180,218
Prepaid expenses	47,072	37,57
	38,951,543	22,813,311
Loans receivable (note 3)	12	10
nvestments (note 4)	8,064	82,963
Property and equipment (note 5)	624,337	529,870
	39,583,956	23,426,154
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	11,816,845	15,232,402
Trust funds payable	-	221,761
Deferred grants and contributions (note 6)	20,363,739	2,448,183
	32,180,584	17,902,346
Deferred lease obligations (note 7)	155,977	198,308
	32,336,561	18,100,654
Fund Balances		
nvested in property and equipment	624,337	529,870
Jnrestricted (note 1)	6,623,058	4,795,630
	7,247,395	5,325,500
	39,583,956	23,426,154

**Commitments and contingency** (note 9)

**Approved by the Board of Directors** 

23

# Ontario Centres of Excellence Inc. Statement of Operations For the year ended March 31, 2007

							2007	2006
						Joint projects		
	General fund	Emerging Materials Knowledge Program	Advanced Design and Manufacturing Institute	Centre for Micro- electronics Assembly and Packaging	Advanced Learning in Photonics for Manufacturing and Biotechnology Applications	Bio-Energy Research Centre	Total S	Total
Revenue	•	)	•	•	•	•	•	•
1000	33 414 189	ı	,	•	•	,	33 414 180	37 711 551
Industry contributions	23,414,182	330.704		42.500			23,414,182	3.317.979
Other government contributions	158,335	1,003,203	1	652,257	169,264	187,850	2,170,909	2,114,630
In-kind equipment contributions	1 0	1 (0	1 7	1 (	110,307	1	110,307	660,934
Other	2,328,272	13,032	201,914	12,149	5,278		2,560,645	1,664,419
	38,184,819	1,346,939	201,914	706,906	284,849	187,850	40,913,277	45,469,513
Expenses								
Program expenditures								
Research	18,785,002	1,714,523	•	527,044	•	1	21,026,569	26,491,715
Talent	1,616,244	•	57,984	•	182,973		1,857,201	1,828,201
Events and sponsorships	847,299	1	1	•	1		847,299	1,279,730
Commercialization New initiatives	3,542,301	1 1					3,542,301	3,343,383
New Illitatives	•	'		1				3,000
	24,790,846	1,714,523	57,984	527,044	182,973	ı	27,273,370	32,958,029
Program development	6,497,550	132,416	143,930	179,862	101,876	135,488	7,191,122	7,217,514
Program support and administration	4,474,528					52,362	4,526,890	4,498,071
	35,762,924	1,846,939	201,914	706,906	284,849	187,850	38,991,382	44,673,614
Excess (deficiency) of revenue over expenses before appropriation	2,421,895	(500,000)	1	,	1	1	1,921,895	795,899
Appropriation	(500,000)	200,000						
Excess of revenue over expenses for the year	ar 1,921,895	,	•	1	•	•	1,921,895	795,899

Ontario Centres of Excellence Inc.

### Statements of Changes in Fund Balances

For the year ended March 31, 2007

			2007	2006
	Invested in property and equipment	Unrestricted	Total \$	Total \$
Fund balances - Beginning of year	529,870	4,795,630	5,325,500	4,529,601
Excess of revenue over expenses for the year Amortization for the year Additions to property and equipment	(263,596) 358,063	1,921,895 263,596 (358,063)	1,921,895 - -	795,899 - -
Fund balances - End of year	624,337	6,623,058	7,247,395	5,325,500

# Centres of Excellence Annual Report 2006/2007

# ntres of Excellence Annual Report 2006/2007

# **Statement of Cash Flows**For the year ended March 31, 2007

Ontario Centres of Excellence Inc.

2007 \$	2006 \$
Cash provided by (used in)	
Operating activities	
ems not involving cash  1,921,895	795,899
Amortization of property and equipment 263,596	215,592
Amortization of deferred lease obligations (33,096)	(34,659)
Gain on settlement of loans receivable - (	(499,998)
Writedown of loans receivable 999,996 1	,099,997
Gain on disposal of marketable securities (1,696,742)	-
Change in non-cash operating working capital (note 10) 15,284,373 (2,	299,671)
16,740,022 (	(722,840)
inoneing activities	
inancing activities	00.400
ncrease (decrease) in deferred lease obligations (9,235)	39,130
nvesting activities	
Purchase of property and equipment (358,063)	(195,348)
Proceeds on settlement of loans receivable -	500,000
Purchase of marketable securities -	(82,929)
Proceeds on sale of marketable securities 1,771,643	-
ncrease in loans receivable (1,000,000) (1,	100,000)
413,580 (	(878,277)
ncrease (decrease) in cash and cash equivalents 17,144,367 (1, during the year	561,987)
Cash and cash equivalents - Beginning of year 10,381,228 11	,943,215
Cash and cash equivalents - End of year 27,525,595 10	,381,228

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

Ontario Centres of Excellence Inc. (OCE) was incorporated under the Corporations Act (Ontario) on July 3, 2003, as a not-for-profit corporation without share capital. OCE's principal objectives are to stimulate, promote, foster, sponsor and direct fundamental and applied research in support of the changing needs of, and challenges faced by, Ontario industries; facilitate the training and education of researchers, scholars, scientists and engineers in areas relevant to Ontario industries; and facilitate transfer, sharing and diffusion of learning, knowledge and technology between Ontario universities and industries.

In June 2005, the Province of Ontario created the new Ministry of Research and Innovation (MRI), which included responsibility for OCE.

### 1 Summary of significant accounting policies

The accounting principles of OCE conform to accounting principles generally accepted for not-for-profit organizations. Significant accounting policies adopted by OCE are summarized as follows:

### Revenue recognition

OCE funds various research projects and activities out of funds received as grant revenue from MRI and from industry and other contributions. OCE follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Expenses are first applied against MRI grant revenue based on budgeted project costs. Contributions for the purchase of property and equipment are deferred and amortized into revenue on a straight-line basis at a rate corresponding with the depreciation rate for the related property and equipment. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Interest income from loans receivable is recorded on a cash basis. This is due to the uncertainty of the future performance and viability of the companies to which such loans have been issued.

Interest from short-term investments is recorded on an accrual basis, with amounts being recorded in the period in which they are earned.

In-kind equipment donations are valued at their estimated fair value based on the information obtained from an independent appraiser. In accordance with the agreements for the joint projects, all equipment donated to the projects is the property of the universities. Therefore, in-kind equipment donations are recorded as a period expense.

### **Unrestricted fund balances**

Unrestricted funds represent accumulated income (net) from other than government grants and industry contributions and include interest income and income from other miscellaneous sources. The unrestricted funds are dedicated to OCE's ongoing programs.

27

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### Cash and cash equivalents

OCE considers all highly liquid investments with a remaining maturity of three months or less at the time of purchase to be cash and cash equivalents. These cash and cash equivalents consist primarily of interest bearing deposits. Investments with maturities from greater than three months to one year are classified as short-term investments. Cash and cash equivalents and short-term investments are stated at cost, which approximates market value.

### Loans receivable

Loans receivable, including interest accrued, are carried at a nominal value due to the uncertainty in the future performance and viability of the underlying companies. An allowance against face value recognizes this uncertainty. Any funds that are collected as repayment of the principal or interest are recognized as an offset to program expenditures at the time of the repayment.

### **Investments**

Investments are recorded at the lower of cost and market value.

OCE receives shares of non-affiliated companies, representing either a recovery of OCE costs associated with a research project, or compensation to OCE under Technology Licensing Agreements concluded with such companies. These investments are in companies in which OCE has neither the control nor the ability to exercise significant influence. They are recorded at nominal amounts due to the uncertainty in the future performance and viability of the underlying companies. Subsequent investments in non-affiliated companies as a result of rights granted to OCE are recorded at the lower of cost and market value. Proceeds from the sale of the investments are recognized as revenue at the time the investments are sold.

### **Property and equipment**

Purchased property and equipment for use by OCE are recorded at cost. Amortization is provided on a straight-line basis over their estimated useful lives as follows:

Computer equipment 3 years Furniture and fixtures 5 years Leasehold improvements term of lease

In accordance with the agreements with the universities, all research equipment purchased with OCE funds is the property of the university making the purchase. Therefore, research equipment purchased is recorded as a period expense.

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### Impairment of long-lived assets

An impairment charge is recognized for long-lived assets when an event or change in circumstances causes an asset's carrying value to exceed the total undiscounted cash flows expected from their use and eventual disposal. The impairment loss is calculated as the difference between the fair value of the assets and their carrying value.

### **Deferred lease obligations**

Deferred lease obligations, including deferred lease inducements, are being amortized on a straightline basis over the term of the lease as a charge to lease expense.

### **Financial instruments**

The organization records all its financial instruments at cost unless otherwise stated. The carrying value of the organization's financial instruments of cash and cash equivalents, accounts receivable, grants receivable and accounts payable and accrued liabilities approximates their respective fair market values because of their short term to realization or maturity.

29

The fair values of loans receivable and investments are not practicable to determine due to a lack of available comparable market information.

### Income taxes

OCE is a not-for-profit organization under the Income Tax Act (Canada) and, accordingly, is exempt from income taxes under Section 149(I)(i) of the Income Tax Act (Canada).

### **Use of estimates**

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results may differ from those estimates.

### 2 Grants receivable

Grants receivable as at March 31 consist of the following amounts:

	2007 \$	2006 \$
MRI		
General	8,575,000	10,075,000
Joint projects	344,000	755,500
Ontario Research and Development		
Challenge Fund (ORDCF) - joint projects	1,022,340	349,718
	9,941,340	11,180,218

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### 3 Loans receivable

Loans receivable are convertible secured debentures bearing interest at the prime lending rate set by HSBC Bank Canada plus 1% per annum, calculated daily, with a maturity date three years from the date of the agreement. The principal and interest can be repaid at anytime. In the event of financing in excess of \$500,000, the outstanding loans and interest shall be converted into common shares as per the terms of the debenture agreement.

As at March 31, 2007, unrecorded accrued interest receivable for the year is \$139,410 (2006 - \$69,063).

As at March 31, 2007, OCE held debentures in the following companies:

		2007		2006
	Face value	Book value	Face value	Book value
	\$	*	\$	3
Ten XC	-	-	150,000	1
Okulus	250,000	1	250,000	1
Hivva	250,000	1	250,000	1
Vital Sines	125,000	1	125,000	1
Intelwaves	250,000	1	250,000	1
Iplay Media	250,000	1	250,000	1
Greencore Composites	250,000	1	250,000	1
Distil Interactive (i2 Learning)	250,000	1	250,000	1
Namzak Labs	250,000	1	250,000	1
Rapid Mind (Serious Hack Inc.)	-	-	250,000	1
Sketch2 Corporation	250,000	1	-	-
Vennsa Technologies Inc.	250,000	1	-	-
Artenga Inc.	250,000	1	-	-
Northern Nanotechnologies Inc.	250,000	1		-
	2,875,000	12	2,275,000	10

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### 4 Investments

Occasionally, OCE receives shares of non-affiliated companies, representing full or partial compensation to OCE under Technology Licensing Agreements concluded with such companies. OCE has investments in one public company and 38 private companies.

In 2006, OCE exercised the warrants in Fibre Optic Systems Technology Inc. costing \$82,963. During the current year, OCE disposed of 614,728 of the shares held in the company. The remaining shares at year-end have been valued at the lower of cost and market value.

### 5 Property and equipment

		2007
Cost \$	Accumulated amortization \$	Net \$
715,443	544,382	171,061
583,449	392,428	191,021
401,822	139,567	262,255
1,700,714	1,076,377	624,337
		2006
Cost \$	Accumulated amortization \$	Net \$
668,351	426,997	241,354
729,578	591,067	138,511
219,943	69,938	150,005
1,617,872	1,088,002	529,870
	\$ 715,443 583,449 401,822 1,700,714  Cost \$ 668,351 729,578 219,943	Cost short amortization short

io Centres of Excellence Annual Report 2006/2007

(

tario Centres of Excellence Annual Report 2006/

33

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### 6 Deferred grants and contributions

Deferred grant revenue represents unspent government funds from MRI, which is for externally restricted operations representing funding received during the current year that is related to a subsequent year's operations.

Deferred industry contributions include committed, but unspent, industry funds, which are for externally restricted operations representing funding received or receivable during the current year that is related to subsequent years' operations.

Deferred other contributions include committed but unspent government and other funds, which are restricted for the joint university and college projects representing funding received during the current year that is related to subsequent years' operations.

			2007	2006
Deferred grant revenue \$	Deferred industry contributions	Deferred other contribu- tions \$	Total \$	Total \$
912,523	1,444,877	90,783	2,448,183	6,763,503
49,300,000	2,630,317	5,071,090	57,001,407	40,396,454
(33,414,182)	(2,284,030)	(3,387,639)	(39,085,851)	(44,711,774)
16,798,341	1,791,164	1,774,234	20,363,739	2,448,183
	grant revenue \$ 912,523 49,300,000 (33,414,182)	Deferred grant revenue \$ industry contributions \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Deferred grant revenue         industry contributions         other contributions           912,523         1,444,877         90,783           49,300,000         2,630,317         5,071,090           (33,414,182)         (2,284,030)         (3,387,639)	Deferred grant revenue \$\$         Deferred industry contributions \$\$         Deferred other contributions \$\$         Total \$\$           912,523         1,444,877         90,783         2,448,183           49,300,000         2,630,317         5,071,090         57,001,407           (33,414,182)         (2,284,030)         (3,387,639)         (39,085,851)

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### 7 Deferred lease obligations

Deferred lease obligations represent escalating lease payments and the value of the benefits obtained by OCE as a result of a rent-free period and leasehold inducements made by the lessor as inducements to enter into a long-term lease agreement.

The components of deferred lease obligations are as follows:

	2007 \$	2006 \$
Leasehold inducements	165,480	165,480
Rent-free period and escalating lease payments	67,721	76,956
	233,201	242,436
Less: Accumulated amortization	77,224	44,128
	155,977	198,308

### 8 Joint university and college projects

### **Emerging Materials Knowledge Program (EMK)**

EMK operates as a joint university and industry consortium for leading edge research in the field of emerging materials.

OCE has an agreement with the Province of Ontario (the province), whereby the province, through the ORDCF program will provide funds not to exceed \$6,864,000 over a five-year period ending March 31, 2007. The EMK network currently consists of OCE, nine Ontario universities and nine companies dedicated to realizing the commercial potential of emerging materials. It is expected this program will be extended to December 31, 2008.

Financial support totalling \$2.5 million from sources other than provincial grants has been committed from OCE to the EMK program commencing April 1, 2002. The support is provided over five years in equal amounts of \$500,000 ending March 31, 2007.

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### **Advanced Design and Manufacturing Institute (ADMI)**

ADMI is an organization created through the partnership of five leading Ontario universities and OCE. ADMI assists these universities and industry to pool key academic and industrial resources to offer a program leading to a Masters Degree in Engineering, Design, Manufacturing and Management. Funding for the organization is provided partly by the participating organizations, and the remainder is generated via course fees.

### **Centre for Microelectronics Assembly and Packaging (CMAP)**

Effective August 1, 2003, OCE, on behalf of CMAP, assumed from the University of Toronto the role of administrative institution. The original contract with ORDCF was from August 1, 1999 to December 31, 2004 with total funds not to exceed \$3,598,672. OCE received approval to extend the project to January 31, 2007 under the same funding terms. Another extension to December 31, 2007 was received during the current year. CMAP operates as a joint university/industry consortium. The network currently consists of OCE, three Ontario universities and five companies.

### Advanced Learning in Photonics for Manufacturing and Biotechnology Applications (PAL)

Effective November 13, 2003, a collaborative partnership was created between OCE, Niagara, Algonquin and the province. The province, represented by MRI, will provide funds not to exceed \$2,660,325 over a five-year period. Niagara, Algonquin and OCE are collectively responsible for the establishment, management and operation of PAL that will provide training opportunities for photonics-related skills in Ontario.

OCE is to receive funds from MRI on behalf of PAL and distributes these funds to the partners. As of March 31, 2007, an outstanding instalment of \$194,000 has been accrued as receivable and \$72,660 has been accrued as a liability to the partners.

Donations of equipment initiated by OCE for the PAL program are recorded in the financial statements.

### **Bio-Energy Research Centre (Atikokan)**

Effective April 1, 2006, the Ministry of Energy established a new Bio-Energy Research Centre linked to the Atikokan Generating Station to encourage and fund research, development and demonstration relating to bio-energy with a focus on co-firing bio-energy sources with coal.

OCE is to receive funds from the Ministry of Energy in order to establish, manage and co-ordinate the research and development program of Atikokan within the governance structure of OCE. The duration of the program is from April 1, 2006 to March 31, 2009 with a total funding of \$4,000,000.

Ontario Centres of Excellence Inc.

### **Notes to Financial Statements**

March 31, 2007

### 9 Commitments and contingency

a) Future minimum lease payments under operating leases are as follows:

	\$
2008	324,687
2009	226,269
2010	185,416
2011	63,535
	799,907

35

b) OCE receives funding from MRI. The agreement with MRI states that these funds be placed in an interest bearing account and that all interest earned on these funds shall be used only for the purposes authorized by MRI. Based on a verbal agreement with MRI, OCE has not deferred these funds, but rather taken them into income as earned, applying the income against program expenditures.

### 10 Statement of cash f ows

The change in non-cash operating working capital consists of the following:

	2007 \$	2006 \$
Decrease (increase) in accounts receivable	(445,004)	620,387
(Increase) decrease in grants receivable	1,238,878	(1,668,772)
(Increase) decrease in prepaid expenses	(9,500)	74,143
(Decrease) increase in accounts payable and accrued liabilities	(3,415,557)	2,989,891
Increase (decrease) in deferred grants and contributions	17,915,556	(4,315,320)
	15,284,373	(2,299,671)

### 11 Pension plan

OCE operates a defined contribution pension plan. The assets of the plan are held separately from those of OCE in an independently administered fund. The pension expense is equal to the contributions paid by OCE.

The contributions paid and expensed by OCE for the year amounted to \$303,151 (2006 - \$255,552).

# tario Centres of Excellence Annual Benort 2006/20

## Ontario Centres of Excellence Board of Directors and Executive Team

### **Board of Directors**

### David J. McFadden, Chair

Partner, Gowling Lafleur Henderson LLP

### Suhayya Abu-Hakima

President and CEO, Amika Mobile Corporation

### **Peter Annan**

President, Sensors & Software Inc.

### **Ken Carpenter**

President and CEO, Burlington Technologies Inc.

### Mark Chamberlain

President and CEO, Trivaris Ltd.

### **Sean Conway**

Special Advisor to the Principal (External Relations) and Fellow, School of Policy Studies, Queen's University

### Paul D. Guild

Professor, Department of Management Sciences, Faculty of Engineering, University of Waterloo

### **Robert Moses**

President and CEO, PCI Enterprises Inc.

### Michael J. Nobrega

President and CEO, OMERS

### Jim Orgill

Managing Director, Advanced Technologies, BDC Venture Capital

### Gilles G. Patry

President and Vice-Chancellor, University of Ottawa

### **Mark Romoff**

President and CEO, Ontario Centres of Excellence Inc.

### Mamdouh Shoukri

President and Vice-Chancellor, York University

### Ian C.P. Smith

Director General, Institute for Biodiagnostics National Research Council Canada

### Jeffrey D. Steiner

President and CEO, Toronto Economic Development Corporation (TEDCO)

### Kimberly A. Woodhouse

Dean, Faculty of Applied Science, Queen's University

### **Executive Team**

### **Mark Romoff**

President and CEO

### **William Ballios**

Vice President, Finance and Administration

### **David Choat**

Vice President, Human Resources

### Robert J. Civak

Managing Director, Centre of Excellence for Materials and Manufacturing

### Michael Fagan

Interim Managing Director, Centre of Excellence for Earth and Environmental Technologies

### **Ann Holtby**

Vice President, Marketing and Communications

### **Bryan Kanarens**

Interim Managing Director, Investment Accelerator Fund (IAF)

### **Ron Killeen**

Managing Director, Centre of Excellence for Communications and Information Technology

### **Dan McGillivray**

Managing Director, Centre of Excellence for Energy

### **Don Wilford**

Managing Director, Centre of Excellence for Photonics





156 Front Street West, Suite 200 Toronto, Ontario, Canada M5J 2L6

Telephone: (416) 861-1092 Fax: (416) 971-7164

Email: info@oce-ontario.org

Web: oce-ontario.org



The Ontario Centres of Excellence Program is made possible through the financial support of the province of Ontario.

