

# nanosonics

Annual Report 09







## Contents

Contents	2
Company overview	4
Chairman's letter	6
Trophon EPR	8
Review of Operations	14
Nanosonics' advantage	17
Intellectual property	18
Information on the Directors, Company Secretary and Senior Management	22
Directors' Report	28
Corporate Governance Statement	32
Remuneration Report	42
Auditor's Independence declaration	43
Financial Report	76
Directors' Declaration	77
Independent Auditor's Report to the Members	79
Shareholder information	81
Glossary	82
Corporate Directory	

**Nanosonics is an Australian publicly listed company located in Sydney. The Company owns intellectual property relating to unique disinfection and sterilisation technologies which have application in a variety of markets including the healthcare industry, food processing, room and space decontamination and manufacturing.**

The Company is focussed on commercialisation of its disinfection and sterilisation solutions which uniquely meet the requirements of a variety of rapidly growing markets. A key feature of the Company's products is the generation of dual revenue streams from devices and recurring revenue from the consumables.

Nanosonics' commercial objectives are to;

- Assert global leadership in low temperature disinfection and sterilisation which will drive both profit generation and shareholder value.
- Supply unique environmentally friendly solutions driving global leadership
- Leverage the Company's broad intellectual property to create and long-term product pipeline

## Competitive advantage

Nanosonics' disinfection and sterilisation platform technology, NanoNebulant®, provides unique safe, non-toxic, fast and environmentally friendly solutions that are able to kill the most resilient microorganisms. This technology has the potential to establish new disinfection guidelines. Nanosonics introduces two new levels of disinfection and sterilisation based on the Company's platform technologies:

- High Level Disinfection Plus (HLD+) includes sporicidal efficacy
- Sterilisation Plus (S+) includes prionicidal efficacy

## Nanosonics' technology

The foundation of Nanosonics' new standards in decontamination is its unique platform technology:

the NanoNebulant technology. Nanosonics is ideally positioned in the rapidly evolving point of care and in-situ market which is likely to continue growing at double digit rates well into the future. This technology involves the production of a proprietary ultrafine mist at ambient temperatures that generates a concentrated and highly effective biocide. The NanoNebulant can be quickly and evenly distributed in an area and applied to a number of instruments or surfaces requiring High-Level Disinfection+. At the end of the process, Nanosonics' patented destructor breaks down the NanoNebulant uniquely leaving oxygen and water as the only by-products.

Nanosonics platform technology has many microbiological and environmental advantages which makes it transferable and scalable to a variety of products to address decontamination issues in markets such as healthcare, food processing, room and space decontamination.

Nanosonics first turned its attention to addressing the needs of distinct healthcare markets due to the significant infection control challenges currently facing clinical professionals. The Company recognised that the NanoNebulant technology has the ability to kill bacterial spores which represented a significant opportunity in infection control, particularly in healthcare environments.

## Ultrasound market

The first market that the Company identified as an attractive opportunity was to revolutionise the processes for disinfection of ultrasound probes. The Company has developed the first commercial automated ultrasound disinfectant at the point of care. The Company worked closely with industry experts and end users from a variety of medical specialisations to understand the features of its core technologies that would be engineered into an ultrasound transducer disinfectant.

## The Trophon EPR: Commercialisation of Nanosonics' first product

The resulting product, Trophon EPR is an automated device specifically designed for the disinfection of ultrasound probes at the point of care. The customer demands included;

- No exposure to toxic chemicals;
- Faster processing times;

- Validation that each transducer has been disinfected to a high level (HLD+);
- Easy and safe integration directly into examination rooms; and
- Enhanced materials compatibility

The Trophon EPR fulfils the functional and efficacy requirements of end users for a variety of healthcare specialties.

Initial customer feedback and acceptance of the Trophon EPR has been exceedingly positive with significant feedback relating to the ease of use, increased patient safety and the ability to remove toxic chemicals from the workspace.

## Future product development

Future investment will be driven by opportunities that have a global application so that the Company builds on its mission to become a global leader in markets in which it operates.

### Milestones FY2009

Manufacturing facility commences production  
 Appointment of extensive distribution network in Europe  
 TGA approval in Australia  
 Devices installed in public and private hospitals in Australia  
 510 (k) application to USA FDA  
 Initial shipments in public and private hospitals in Europe  
 First re-orders received for Trophon EPR

### Objectives and major goals for FY2010

Roll-out of the Trophon EPR in Europe  
 FDA approval  
 Finalisation of appointment of distributors in the USA  
 Opening of distribution channels in selected Asian countries  
 Commercialisation of the TEE<sup>1</sup> probe disinfectant  
 Development of new product pipeline

<sup>1</sup> Transoesophageal Echocardiogram, a type of probe. This and other terms are explained in the Glossary on page 81.

### What is Infection control?

Infection control is the practice of preventing the spread of infection within healthcare settings and beyond.

This means preventing the transmission of pathogenic microorganisms from:

- Patient to patient
- Patients to healthcare workers
- Healthcare workers to patients

Part of an effective infection control program is the sterilisation and disinfection of reusable medical devices.

### What is the difference between disinfection and sterilisation?

Sterilisation is a process that effectively kills transmissible agents such as bacteria, viruses and spore forms. Common sterilisation does not remove prions. Sterilisation can be achieved through heat, chemicals, irradiation, high pressure or filtration.

High-level Disinfection process destroy vegetative bacteria, mycobacteria, fungi and viruses but not high levels of bacterial spores within the recommended contact time.

### What is the difference between sporicidal and prionicidal efficacy?

Sporicidal efficacy means that the NanoNebulant process destroys the most resilient micro-organisms and viruses. High Level Disinfection+ destroys all micro-organisms and viruses including high levels of bacterial spores within the recommended contact time.

Prions are proteins that are infectious and that cause cellular damage such as Creutzfeldt-Jacob disease, also known as the "mad cow" disease. Prionicidal efficacy means that the process is able to eliminate significant copies of human prions, which are the most resistant.



It is with great pleasure that I present the Annual Report for Financial Year 2009.

Nanosonics has undergone a significant transition during the year, culminating with the commercial release of Trophon EPR into the ultrasound markets in Australia, New Zealand and a controlled roll out into Europe. Initial feedback from our customers is very pleasing, with the product exceeding expectations from a customer acceptance and benefit perspective.

The healthcare markets which Nanosonics is initially targeting continue to grow rapidly and evolve in their needs. These changes are being driven by the ever increasing challenges that microbial evolution and drug resistance are bringing to healthcare. The most recent of these being increased awareness and reporting requirements for highly drug resistant micro-organisms such as MRSA and *Clostridium difficile* infections in many European countries. This is resulting in infection control practitioners driving standardisation and measurability of processes to ensure the highest possible level of disinfection and sterilisation. These developments have enabled our distribution partners to position the Trophon EPR as a reliable process providing quality assurance to the end user. Other changes include major concerns with current toxic chemicals being utilised in the healthcare setting today which are progressively being banned from major international markets. These contribute to make the Trophon EPR the product of choice.

The Company focus for FY2010 is to capitalise on the growth generated by the Trophon EPR, initially into ANZ and Europe, and, later in the year to the USA (pending FDA approval). Feedback through our distribution network continues to confirm that there is a demand and immediate need for such a breakthrough product. The Company will continue to expand distribution networks into the Middle East and Asia during FY2010 as it seeks to maximise the opportunity from its first mover advantage with this fully automated solution.

New product development remains a constant focus for Nanosonics, with the team achieving a number of major breakthroughs which will drive growth for the Company well into the future. Research and development programs continue in the food market, as well as in room and hard surface decontamination. Commercial discussions continue with several major international and local corporations as well as significant large scale potential customers.

Over the period of the last 12 months, the world has been impacted by not only a financial crisis but more importantly one of confidence. Australia has demonstrated that it has maintained its relative strength and indeed done better than many global economies. Nanosonics emerges in a strong position, and is well resourced and in fact continues to invest in innovation in a time many other competitors have cutback. This will ideally position Nanosonics to capitalise on the escalating demand for infection prevention solutions as a consequence of the increasing biological challenges faced in all key industry sectors.

The sustained demand for healthcare consumption makes this sector a stand out opportunity for the future.

I would like to thank the entire Nanosonics team for the extraordinary efforts in achieving the Company's ambitious milestones. I would also like to thank the Board of Directors for their contributions during FY2009. In particular I welcome David Slack to the Board of Nanosonics. David brings extensive experience in driving rapid growth in complex businesses, and his insightful inputs have already been much appreciated. I would also like to recognise William Widin for his counsel and valuable contribution to Nanosonics during his tenure as a Director. William resigned from the Board in February 2009 in order to devote more time to his other interests, and we wish him well.

In closing, the Company is strongly positioned as an emerging leader in the rapidly growing point of care market together with an unparalleled portfolio of opportunities across many industrial sectors. Your company maintains a commitment to grow shareholder value through a focus on innovative delivery of enhanced healthcare outcomes all within the context of environmentally friendly technologies.



**Maurie Stang**  
Non-Executive Chairman

Sydney  
19 August 2009

***“The Trophon greatly improves our workflow”.***

David Singe, Radiographer

**Nanosonics’ first Customer**

The Trophon EPR was recently installed in the Maryborough District Health Service in regional Victoria. The product has been favourably received by the Radiology Department. Particularly impressed is Mr David Singe, Radiographer at the hospital.

Mr Singe was especially enthusiastic about the fact that he would not have to introduce any toxic chemicals like glutaraldehydes into his department.

*“When I heard about the Trophon EPR, I contacted Nanosonics immediately. A Nanosonics representative visited our hospital to demonstrate the Trophon EPR. For me it was the ideal way to disinfect a probe. Our Infection Control Department waited to purchase a new disinfection system until the Trophon EPR became available”.*

The Trophon EPR has significantly aided the workflow of the ultrasound department. The product has been installed directly at the point of care and is accompanying the ultrasound machine in the examination room. Mr Singe explained that this is a significant benefit due to the time it saves in comparison to other systems available. These systems would require a separate room

for disinfection and increase the time per patient by 15 to 20 minutes.

*“With the Trophon EPR we only have to wash the probe with soap and water, dry the probe and put it in the device which is located in the examination room. In the meanwhile we can start with the next patient. When we are ready to start the next procedure, the probe is high level disinfected and immediately ready for use”.*

Mr Singe points out that another major benefit of the Trophon EPR is that it is able to disinfect most ultrasound probes. Mr Singe informed us that due to the introduction of the Trophon EPR all probes are able to be disinfected and this has been a benefit with small parts, surface probes that are often used in assessing skin infections.

*“We have got into a routine now that all probes are being disinfected in the Trophon EPR. Most different probes fit in the Trophon which is a nice benefit. Previously it was especially difficult to disinfect the smaller probes”.*

Mr Singe is also very positive about the ease of use of the Trophon EPR. *“The device tells you exactly what to do. It is straightforward and beeps when it is finished. The device gives you notice that the disinfection has been successful which makes us confident that the probes have been disinfected properly after each cycle. The Trophon EPR is not only the best method of disinfection but also the easiest”.*

## Global Market Opportunity

Number of ultrasound procedures annually in different markets and segments

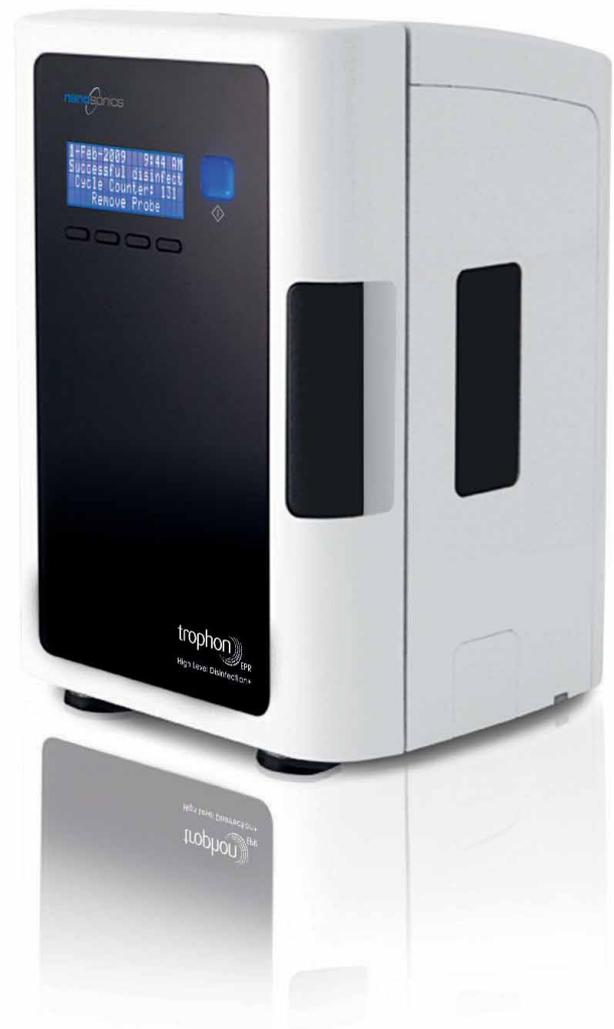
Country / Region	Radiology intracavity	O&G intracavity	Other targeted	Total targeted market	Total available market
ANZ	0.5	1.0	0.2	1.7	5.8
Western Europe	7.0	16.0	3.0	26.0	70.0
USA & Canada	7.4	11.9	9.2	28.5	90.6
Asia	8.2	17.0	22.0	47.2	215.0
Japan	3.4	13.0	12.0	28.4	76.0
Total World Market	29.9	71.9	58.4	160.2	457.4

Frost & Sullivan, Market insights into the Global Ultrasound Market, September 2006  
According to this report, the Global Ultrasound Market is growing at approximately 5% per annum.

The US Centers for Disease Control (CDC) recommends the use of hydrogen peroxide for high-level disinfection of intra-cavity probes because it is “not toxic to staff, patients, probes, and retrieved cells”. High-level disinfection of ultrasound probes between patients is also recommended. These requirements were announced in the “Guidelines for Disinfection and Sterilization in Healthcare Facilities 2008” from the US Centers for Disease Control (CDC).



The Global Ultrasound Market is extremely attractive for Nanosonics. Ultrasound as a diagnostic modality continues to increase in clinical relevance with total potential market opportunity of **500 million** ultrasound procedures per annum globally. This equates to a total market opportunity in excess of **AU\$1.5B**.



# 8 Review of Operations

Financial Year 2009 was a significant year in the history of the Company. Achievements in FY 2009 included registration and subsequent product launch into Australia; lodgement of the FDA 510(k) regulatory application in the USA; scale up of the manufacturing capability and the launch of the Trophon EPR into Australia, New Zealand and France.

Financial Year 2009 is the first year in which Nanosonics recognised sales revenues. This milestone in the Company's development occurred in March 2009, with the controlled release of the Trophon EPR into the Australian market. This was planned to enable the Company to work with local customers and understand the product performance. Feedback has been excellent, with strong support for the product and its performance characteristics. Subsequent roll outs have occurred in New Zealand and France.

The controlled roll out plan has been executed to enable the development of robust internal processes and procedures to ensure that the Company can continue to focus upon delivering the highest quality device at the lowest delivered cost. The plan is expected to run into Q1 of FY 2010 which will provide up to 6 months experience with product in the field. This experience will provide the necessary data upon which a decision will be made to enable the Company to then pursue a more aggressive introduction to other markets. Revenue and Cash flows achieved in Q4 FY2009 and Q1 FY2010 are on track with the controlled roll out strategy. Revenues and Cash flows in FY2010 are expected to increase as the Company executes the market launch strategies to meet market demand.

The Company has been further encouraged by strong demand from the Australian market, and significant demand from the rapidly evolving European markets.

## Market drivers

**Australia & New Zealand** The initial markets in Australia and New Zealand have multiple benefits as a first market for the Trophon EPR. The benefits include a supportive customer base driven by legislative requirements to provide High Level Disinfection between patients when intra-cavity probes have been used.

The majority of hospitals and private clinics are currently using chemical disinfectants with their attendant disadvantages. As a result of these current practices, there has been significant interest in the Trophon EPR to provide a more compliant OH&S operating environment for end users. Feedback has been very positive from our customer base, with particular reference to the ease of use of the product, and the removal of toxic chemicals from practices.

**Europe** In Europe there are several key market drivers, these include the rapid spread of "superbugs" such as MRSA and *Clostridium difficile*, both of which can be transferred through skin contact. Infection control practitioners are now driving the use of standardised procedures to mitigate the risk of transmission of these bacteria between patients. Other drivers include the desire of several national health regulatory bodies to ban the use of dangerous chemicals such as aldehydes in their hospitals. This provides a significant opportunity for an environmentally friendly customer solution such as the Trophon EPR.

**USA** Nanosonics' entry into the largest world market has been aided by the Centers for Disease Control (CDC) Guidelines for Medical Disinfection which confirms -that aldehydes may be toxic when used in IVF procedures; that currently used aldehydes may damage ultrasound probes; and, that alcohol based solutions are not adequately validated to ensure efficacy. This pre-eminent body recommends the use of a hydrogen peroxide based solution for High Level Disinfection of probes between patients. The Trophon EPR complies fully with their guidelines, providing a quality assured process with both OH&S and environmental benefits which is expected to gain rapid acceptance in this market.

## Competition

Based on market feedback, the Company believes that it enjoys a significant first mover advantage. The Trophon EPR is the only device providing a fully automated, quality assured process that removes toxic chemicals from the workplace and provides a higher efficacy of disinfection (High Level Disinfection Plus) and can be installed at the point of care. Currently available disinfection solutions are predominantly manual in nature or involve the use of toxic chemicals, neither of which gives the range of benefits that are provided by the Trophon EPR.





Nanosonics has built an exciting foundation for its future product development program

Ron Weinberger, Executive Director and General Manager Innovation and Technology

Within Europe there has been some historical use of "wipes" which decontaminate probes to a limited level without short efficacy and reproducibility. Due to the manual nature of this process and its limitations, there is a material risk that inadequate disinfection has occurred. Some health services in Europe have advised that if an automated disinfection process is available, it should be used to replace the manual one.

### Market launch strategy

Throughout the year, Nanosonics has expanded its distribution network in Australia, New Zealand and Europe. Product releases into the UK, Germany, Switzerland, Italy, Portugal, Russia, Israel, Scandinavia, Poland and the Baltic States remain on track for the first half of FY2010.

The Company is also in advanced discussions with potential distribution partners in Singapore, Malaysia, Hong Kong, and Taiwan. Anticipated product launch in these markets is expected later in FY2010.

Distribution partners have been identified in the USA, with appointments expected in Q2-FY2010. The application to the FDA for approval to market was lodged in May 2009. Due to recent changes in the US administration, it is expected that discussions with the FDA will commence late in Q2-FY2010.

Discussions with potential distributors in Japan are underway, with a planned regulatory lodgement to the Ministry of Health in Q3 FY2010. It is anticipated that this approval may take up to 18 months for processing.

### Research & Development

The Company continues to invest in future product development through its Innovation & Technology Team. The team has made outstanding progress with several new products, including a Transoesophageal Echocardiogram (TEE) probe disinfector which has reached prototype stage, and is performing to expectations.

The team is also evaluating entry strategies into the single lumen endoscope reprocessing market. This market is highly regulated, with the new standard EN15883 controlling the process parameters for development.

Other market segments currently under evaluation include room and space decontamination.

A number of new international patent applications have been lodged with IP Australia focussing on novel approaches to accelerate decontamination and remediation of confined spaces such as operating theatres. Further protection has been sought for the Trophon consumable and the earlier core technology patents have entered the international review process.

Nanosonics has made the transition from a pure R&D Company in FY2008 to a Company that has proven it can take a product to the commercial stage in FY2009. This transition has been smoothly managed by the use of specific resources for each stage of the Company's growth. The Company remains focussed upon the development of customer centric solutions that require the development of new & innovative solutions that bring a competitive advantage to the business.

A feature of the solutions is that they will generate dual revenue streams from the sales of equipment and the subsequent sales of consumables.

Future opportunities within the healthcare market continue to grow. The move towards day surgeries and physician provided healthcare are opening up new opportunities for the development of solutions that provide a rapid disinfection cycle, with minimal operator intervention. Nanosonics' through the continued refinement of the NanoNebulant technology is well placed to take advantage of this growing opportunity.

## Manufacturing & Operations

The commercial production of the Trophon EPR commenced late in Q2-FY2009, with the hiring of the first assembly team. This team is now scaling up production at the facility in Sydney. The Trophon production line capacity can be increased to meet market demand of up to 4,000 units per annum. Arrangements are already in place to transition to an external manufacturer once this increased capacity is reached. The transition can be managed quickly and without impact, in parallel with current product assembly.

The Company has made a major investment in Quality Systems and processes to further improve the development of manufacturing. A dedicated Quality manager was appointed in July 2009.

One of the major projects undertaken during Q4-FY2009 has been to ensure the integrity of the supply chain for

critical production materials. Nanosonics owns the core tooling associated with custom designed components and some of the unique parts. The Company is working closely with major vendors and manufacturers of the parts to ensure that sufficient buffer stock is held to address increased demand.

## Financial Results

The Company recorded its first revenues from sales of \$309,000. Operating costs of \$10,286,000 reflected an increase of \$84,000 on the previous year and included the costs of transitioning to manufacturing and the development of overseas markets.

A comparative summary of the consolidated financial results for the year to 30 June 2009 is set out below.

	2009	2008	2007	2006
	A\$'000	A\$'000	A\$'000	A\$'000
<b>Revenue</b>				
Sales	309	–	–	–
Less Cost of Sales	-121	–	–	–
Gross profit	188	–	–	–
Government grants received	150	1,112	2,221	1,366
Other income	–	–	9	–
Interest income	1,194	1,943	635	220
<b>Expenses</b>				
Operating expenses	-10,286	-10,202	-8,568	-3,349
Operating loss before tax	-8,754	-7,147	-5,703	-1,763
<b>Cash Assets</b>				
Cash and cash equivalent assets on hand	13,881	24,225	31,907	6,590
<b>Market capitalisation</b>				
Closing share price on 30 June	\$0.40	\$0.20	\$0.64	Not ASX
Shares on issue at 30 June (millions)	196	195	194	123
Market capitalisation at 30 June (A\$ millions)	\$78.5	\$39.0	\$124.4	

Further details of the financial results are set out in the financial statements on pages 43 to 46 of this report.

Net cash outgoings amounted to \$10,347,000, an increase of \$2,664,000 on the previous year, which included investments of \$1,195,000 in capital equipment and \$919,000 in increased inventories. Cash reserves at the end of June 2009 of \$13.9 million are consistent with the Company's business plans. The Company remains well-positioned, with sufficient cash reserves, to execute the commercialisation of Trophon EPR and its other planned activities in FY2010.

Nanosonics has made significant changes to enable it to better focus upon the continued successful release of the Trophon EPR, whilst also continuing to develop subsequent product releases. These changes have resulted in an improved alignment of the Company's capabilities with its anticipated needs in the short to mid-term.

The Nanosonics team is committed to the Company's success, with recent options and share issues rewarding their strong contribution on the Company progress, and enabling them to share in the future success of the business. The Company continues to develop high potential individuals through the use of stretch assignments and development beyond their current job scope. The team continues to respond well to these initiatives and learning opportunities, which will continue to drive the Company's future success.

The features that make Nanosonics a strong, competitive and sustainable business are discussed in more detail on page 14 of this report. These features make Nanosonics a compelling global partner, a stimulating career for its people and an attractive prospect for our shareholders.

#### **In conclusion**

The Company is well positioned for its expected growth in FY2010. The market opportunities are well defined, and the markets are rapidly evolving and defining their requirements for technologies led by the launch of the Trophon EPR.



**David Radford**  
Executive Director and CEO

Sydney  
19 August 2009



## Integration

Nanosonics' advantage is founded on its unique patented technologies, its highly capable staff, its understanding of market opportunities and its careful management of risk. These combined ensure that Nanosonics is a company well-positioned and prepared for future success and sustainability.

The Company has purposefully focussed its activities to date on developing and commercialising its first product so that it creates a technological platform for the future whilst proving its technological concepts for new markets and generating self-sustaining cashflow. Nanosonics' vision is to provide safe, effective microbial control through unique products developed for precisely targeted applications of its technology.

Nanosonics' long term focus requires sustainable business practices and sound governance and risk management to provide best value to stakeholders, the community and the environment.

## Business continuity

Nanosonics' continuously assesses risks across its business. The Company's risk management processes are designed to understand the level of risk the Company is exposed to and to take the necessary precautions to reduce risks to acceptable levels at all times.

## Intellectual property

Nanosonics' IP portfolio is the foundation for the Company's success and sustainability. Its IP strategy aims to protect the IP through families of inter-related patents protecting all the unique properties of the Company's products and technology. Full details of Nanosonics IP can be found on page 17 of this report.

## Quality control

Nanosonics is proud of its excellent record in quality standards and to date has met all regulatory objectives. The Company's quality management system is integrated at each level of business and is designed to facilitate all areas of research, product development and manufacturing whilst remaining compliant with regulatory requirements.

## Cash reserves

Nanosonics' disciplined capital management program has ensured continuous and adequate cash reserves for its operations. To date the Company has been debt-free and current commercialisation strategies are planned to ensure its current operations are self-funded.

## Supply chain

Nanosonics global Supply Chain program ensures that crucial vendors meet and exceed our stringent quality requirements. All suppliers have been assessed in terms of quality accreditation and financial stability to ensure continued supply of quality components.

This process is coupled with ongoing supplier monitoring activities, ensuring continuous improvements in quality.

Continuity of Supply Chain and risk management is managed through:

- Vendor relationship management;
- Ownership of all custom tools;
- Use of generic components where possible; and
- Strategic selection of key suppliers – the Company's most critical suppliers are Australian based.

An extensive relationship development program has been undertaken with crucial vendors to ensure that Nanosonics' business requirements, such as quality, lead-time and stock holding are met.

## Environment

The Company has set a goal for all products to be RoHS compliant by 2010. Additionally, the only by-products of the NanoNebulant disinfection process are water and oxygen, while the consumable bottle is made from recyclable plastic. Where possible, promotional and support materials are printed on recycled paper.

The integration of our ERP and QM system ensures that only products of the highest quality are delivered to our customers.

Arjang Safa, General Manager Manufacturing and Supply Chain

## Social

Innovation is a central part of Nanosonics culture and all employees are encouraged to develop and pursue innovative ideas to deliver solutions that meet customer needs. Nanosonics' requirements of new product development are that its products satisfy all of its benchmarks for safety, convenience, quality assurance and environmental sustainability.

With internal skill sets including chemical science, bacteriology and virology, physics, electrical engineering, systems engineering, industrial design, device manufacturing, regulatory affairs, marketing and international business development, the Company has invested in a team that delivers results. Many employees have years of experience gained in the biotechnology sector and in established medical devices companies. It is only with the best people that big ideas can be generated.

The Company actively encourages its employees to pursue lateral and ground breaking R&D programs. These have generated significant benefits for the business.

Nanosonics attracts, recruits, motivates and develops people with the skills and experience needed to create the foundations for its future.

## Governance

Nanosonics recognises the importance of good governance in the Company's leadership and operations. The principles and standards of governance are set by the Board of Directors. The Board is composed of a strong yet complementary mix of relevant and proven individual experience and skills. The Board and senior management understand and apply the generally accepted principles of good governance. Details of how the Board, the Company Secretary and management interpret and apply good governance are set out in the Corporate Governance Statement on page 28.

The Company's quality management system is integrated at each level of business and is designed to facilitate all areas of research, product development, manufacturing and customer service.

Jianhe Chen  
QA Manager



Periodically Nanosonics undertakes extensive skills audits in conjunction with business needs and existing talent, as evidenced within the business. The Company has a process to ensure that current capabilities match the Company's needs now and for the future.

Kirste Jarvis  
HR Manager



Nanosonics' strategy is to protect its platform technologies and designs that provide significant competitive advantages and to protect future revenues and product ranges. Nanosonics' platform technology is protected by a combination of patents, trademarks and confidentiality agreements.

Nanosonics current portfolio exists of 13 patent families. Each patent family provides Nanosonics with a fundamental competitive advantage protecting the Company's inventions on multiple levels:

1. Core technology platform
2. Strategic patents to protect core IP
3. Specific product related protection such as the mechanisms of aerosol manipulation and disinfection certifying disinfection and measuring aerosol
4. Consumable protection including design
5. Establishing infringement barriers to prevent copying of our products

The Company continuously develops its patent portfolio with three new patent applications added in the year to 30 June 2009.

Patent Family	Description	Status (all regions)	Priority Date*
Improved Disinfection	Aerosol disinfection using liquid disinfectant combined with a surfactant	Granted or awaiting / undergoing National examination <sup>a</sup>	23 June 1998
Quaternary Ammonium Compound Liquid Disinfectant	A method of high level disinfecting using a liquid incorporating greater than 1% w/w quaternary ammonium compound	Granted or awaiting / undergoing National examination <sup>a</sup>	9 July 2004
Space Disinfection	A method for disinfecting a space using a concentrated aerosol or with controlled humidity	Awaiting / undergoing National examination <sup>a</sup>	4 August 2005
Improved Aerosol	An ultra fine mist to disinfect and sterilise, including the process of vapour removal and controlled humidity	Awaiting / undergoing National examination <sup>a</sup>	4 August 2005
Membrane Sterilisation	Enclosing an article in a chamber featuring a semi-permeable membrane and introducing a biocide for sufficient time such to sterilise or disinfect the article	Awaiting / undergoing National examination <sup>a</sup>	4 August 2005
Membrane Concentrator	An aerosol and vapour biocide concentrator incorporating a semi-permeable membrane	Awaiting / undergoing National examination <sup>a</sup>	4 August 2005
Membrane Vapour Concentrator	A vapour biocide concentrator incorporating a semi-permeable membrane	PCT awaiting National entry	2 February 2007
Sub-cycle Based Disinfection System	A method for fast disinfection and rapid removal of residual sterilant	PCT awaiting examination	30 June 2008
Aerosol Sensor	A method and apparatus for the measurement of aerosol for the purposes of certifying sterilization	PCT awaiting examination	30 June 2008
Safe Chemical Delivery System	A method and apparatus for the safe handling of chemical consumables	PCT awaiting examination	30 June 2008
Nebulizer Manifold	A manifold for improving aerosol properties and flow in a chamber	Provisional filed	15 August 2008
Decontamination Aerosol	Self neutralising aerosols	Provisional filed	22 May 2009
Disinfection Product and process	Self neutralising aerosols	Provisional filed	22 May 2009
Design Family			
Bottle	Non-refillable bottle for safe delivery of consumables	Priority application filed	1 June 2009

a) some national applications not of interest have now been abandoned

\* Patents expire 20 years after filing date or priority date.

### Maurie Stang

#### Non-Executive Chairman

Mr Stang has been Non-Executive Chairman since March 2007 and a member of the Board of Directors since November 2000. He was re-elected on 26 November 2007.

Mr Stang is a member of the Audit and Risk Management committee, Governance and Nomination committee and Remuneration committee.

#### Skills, experience and expertise

Mr Stang has more than two decades of experience building and managing companies in the healthcare and

biotechnology industry in Australia and Internationally. He has strong business development and marketing skills which resulted in the successful commercialisation of intellectual property across global markets.

#### Other current and former Directorships in last 3 years

Mr Stang is Non-Executive Chairman of Aeris Environmental Limited (ASX code: AEL)

#### Related parties

Details of transactions in the financial year ended 30 June 2009 between the Group and entities which are considered



David Fisher



Maurie Stang



David Slack

to be Director-related parties are set out in note 28(f) to the Financial Report on page 69.

**David Radford BSc (Hons), MBA, GAICD**

**Executive Director and Chief Executive Officer**

Mr Radford has been Chief Executive officer and a member of the Board of Directors since 16 June 2008. He was re-elected on 18 November 2008.

**Responsibilities**

Mr Radford has executive responsibility for the overall leadership of the business and implementation of its strategic

plans, specifically to build strategic partnerships and exploit opportunities in product innovation and business development.

**Skills, experience and expertise**

Mr Radford has more than two decades of international business experience in medical device and healthcare industries with leading companies, including senior positions with GE Healthcare, Brambles Australia and Cobe Laboratories. Mr Radford has been actively involved in the global roll-out of new products and services in Australia and Asia. He has extensive skills in marketing, business strategy, change management and organisational structure.



Chris Grundy



Arjang Safa



Ron Weinberger



David Radford

Mr Radford is qualified with a BSc Honours degree in Applied Biological Sciences from Bristol Polytechnic (UK), specialising in microbiology, and an Executive Masters of Business Administration degree from the Australian Graduate School of Management.

**Other current and former Directorships in last 3 years**  
No ASX listed companies

#### **Ron Weinberger BSc (Hons), PhD**

**Executive Director and General Manager Innovation and Technology**

Dr Weinberger was appointed Executive Director on July 2, 2008. He was re-elected on 18 November 2008.

#### **Responsibilities**

Dr Weinberger is General Manager Innovation and Technology and has executive responsibility for all of Nanosonics' discovery and development programs, including the portfolio of intellectual property.

Dr Weinberger is also the Chairman of the Company's Advisory Board.

#### **Skills, experience and expertise**

Dr Weinberger has been with the Company since August 2004. He has over two decades of experience in the medical research and biotechnology arena. He is an Intellectual property expert and entrepreneur in the development of novel technologies. Dr Weinberger is co-inventor of several of Nanosonics' key technologies which underpin the Company's platform technology. He has proven experience in negotiating, developing, designing and managing large scale R&D programs with a strong commercial perspective.

Dr Weinberger is qualified with a BSc Honours degree in pharmacology and a PhD degree in medical biochemistry. He has authored more than 50 papers in the biomedical sciences.

**Other current and former Directorships in last 3 years**  
No ASX listed companies

#### **David Fisher BRurSc (Hons), PhD, MAppFin, FFin** **Non-Executive Director**

Dr Fisher has been a member of the Board of Directors since 30 July 2001. He was re-elected on 18 November 2008.

Dr Fisher is Chairman of the Audit and Risk Management Committee and of the Remuneration Committee and he is a member of the Governance and Nomination Committee.

#### **Skills, experience and expertise**

Dr Fisher is managing director of Brandon Capital Partners, a leading Australian venture capital provider. He has over two decades of extensive operating experience in the biotechnology and healthcare industry in Australia and overseas. Dr Fisher was CEO of Peptech Limited (now part of Cephalon Inc (Nasdaq:CEPH)). During this period Peptech grew from a start up to having R&D operations in Australia, the UK, the US and manufacturing operations in Denmark. Prior to Peptech Dr Fisher spent ten years with Pharmacia AB (now part of Pfizer, Inc), including five years at their head office in Sweden. Dr Fisher is qualified with a first class Honours degree in Rural Science, a Masters degree in Applied Finance and Investments and a PhD in Chemical Engineering from the University of Sydney.

#### **Other current Directorships**

Dr Fisher is a director of Australian Biomedical Fund No.1 Ltd, Australian Biomedical Fund No.2 Ltd and Australian Biotechnology and Healthcare Fund No.3 Ltd, all of which are investors in the Company (see page 79 of this report) and Signostics Inc.

**Other current and former Directorships in last 3 years**  
No ASX listed companies.

#### **David Slack BEc**

**Non-Executive Director**

Mr Slack was appointed Non-Executive Director on 5 February 2009.

Mr Slack is Chairman of the Governance and Nomination committee a member of Audit and Risk Management committee.

#### **Skills, experience and expertise**

Mr Slack has over three decades experience in the business, finance and banking industry. He has held senior positions with a number of listed financial institutions including Suncorp Metway Limited and Macquarie Bank Limited. Mr Slack was with Macquarie Bank for a period of ten years and held the positions of Executive Director and Managing Director of Macquarie Leasing Pty Limited. Mr Slack was responsible for the formation of Macquarie Leasing and its subsequent development into a substantial business. Mr Slack is qualified with a Bachelor of Economics degree.

#### **Other current and former Directorships in last 3 years**

Macquarie Leasing Pty Ltd, a subsidiary of Macquarie Bank Limited (ASX code: MBL).

## Interests of Directors

The relevant interest of each Director in the shares and share options of the companies within the consolidated Group at the date of this report, as notified by the Directors to the Australian Securities Exchange in accordance with section 205G(1) of the Corporations Act 2001, are set out below. All shares and options are in the parent entity, Nanosonics Limited.

Directors	Ordinary shares	Options over ordinary shares
Maurie Stang <sup>5</sup>	28,377,000	–
David Radford	116,117	1,000,000
David Fisher <sup>6</sup>	944,426	–
David Slack	100,000	50,000
Ron Weinberger	108,203	1,175,000

<sup>5</sup> Mr Maurie Stang (Non-Executive Chairman) and Mr Bernard Stang each have a relevant interest in the holdings of the other's shares as they are associates of each other for the purposes of section 15 of the *Corporations Act 2001*. At the date of this report, Mr Bernard Stang held 28,540,000 shares in the Company.

<sup>6</sup> Dr David Fisher is a director of Brandon Capital Management Pty Limited (Brandon), which manages three investment funds independent of Brandon (each a 'Fund') that in aggregate held 8,083,789 shares at the date of this report. Whilst Brandon is expected to and does make recommendations to the boards of management of these Funds, neither Dr Fisher nor Brandon is able to control decisions regarding any Fund's shares. Accordingly, the Directors advise that Brandon does not have any relevant interest in any of the shares held by any Fund and they are not included in Dr Fisher's interests stated above.

### Chris Grundy BCom, FCA, FCIS, GAICD

#### Chief Financial Officer and Company Secretary

Mr Grundy has been with the Company since June 2007. He is responsible for overall financial management, company secretarial practice and investor relations.

#### Skills, experience and expertise

Mr Grundy has over 15 years experience in medical devices, pharmaceuticals and complementary medicines, with Bayer and other large Australian companies, including CFO and Company Secretary of an ASX top-200 company. He has held lead roles in general management, finance, operations and sales and marketing in Australia, Britain and Southern Africa, and in professional services with Ernst & Young in Southern Africa. Mr Grundy is qualified as a Chartered Accountant and as a Chartered Secretary, and holds a B.Com degree and a Graduate Diploma in Applied Corporate Governance. He has 8 years experience as a Company Secretary.

### Arjang Safa BTech

#### General Manager Manufacturing and Supply Chain

Mr Safa has been with the Company since May 2007 and was appointed General Manager Manufacturing and Supply Chain in January 2008. He is responsible for the coordination of operational activities to ensure that the Company's products are manufactured and supplied in line with demand.

#### Skills, experience and expertise

Mr Safa has over 15 years of experience and in-depth knowledge of product design for manufacturability, plant design and layout, supply chain management and internal operations systems development to the Company.

Mr Safa is qualified with a B.Tech (Manufacturing Engineering) degree and an associate diploma in Mechanical Engineering.

The Directors present their report on the consolidated entity (referred to hereafter as the Group), consisting of Nanosonics Limited and the entities it controlled at the end of, or during, the year ended 30 June 2009.

This report includes the Review of Operations on pages 8 to 13, the Information on Directors and Secretary (including Interests of Directors) on pages 18 to 21 and the Remuneration Report on pages 32 to 41.

### Principal activities

During the year the continuing principal activities of the Group consisted of research, development and commercialisation of infection control and decontamination products and related technologies.

In addition, the Company made its first sales, in March 2009, of the Trophon EPR ultrasound probe disinfectant and associated consumables. Further information is included in the Results of Operations below, in the Review of Operations and in the Financial Statements.

There have been no other significant changes in the nature of these activities during the year.

### Results of Operations

Revenue for the year amounted to \$1,653,000 (2008: \$3,055,000) including 309,000 (2008: \$nil) from sales. The net operating loss before and after income tax amounted to \$8,754,000 (2008: \$7,147,000). The Group incurred net cash outflows for the financial year of \$10,347,000 (2008: \$7,682,000) excluding net proceeds from the issue of shares) which were applied to on-going business development and operations. Cash reserves at 30 June 2009 amounted to \$13,881,000 (2008: \$24,225,000). Other information on the operations of the Group and its business strategies and prospects is discussed in the Review of Operations on pages 8 to 13 of this annual report.

### Significant changes in the state of affairs

There were no significant changes in the state of affairs of the Group during the year and to the date of this report.

### Listing rule 1.3.2(b)

Nanosonics' admission to the Australian Securities Exchange Limited on 17 May 2007 was under Listing Rule 1.3.2(b) which applies where half or more of the Group's total tangible assets are cash or in a form readily convertible to cash and the Group has commitments consistent with its business objectives to spend at least half of its cash and assets readily convertible to cash.

Since 17 May 2007 and to the date of this report, the Group used and continues to use the cash and assets readily convertible to cash which it had at the time of admission in ways consistent with its business objectives.

### Dividends – Nanosonics Limited

The Directors do not recommend the payment of a dividend for the financial year ended 30 June 2009. No dividends were proposed, declared or paid during the financial year (2008: Nil).

The immediate purpose of the Company is the commercialisation of its first products. The Company's dividend policy in the future, the extent of future dividends and any franking of dividends will depend upon the profitability and the financial and taxation position of the Group at the relevant time.

### Matters subsequent to the end of the financial year

No matter or circumstance has arisen since 30 June 2009 that has significantly affected, or may significantly affect:

- (a) the Group's operations in future financial years;
- (b) the results of those operations in future financial years; or
- (c) the Group's state of affairs in future financial years.

### Likely developments and expected results of operations

Likely developments in the operations of the Group that were not finalised by the date of this report included programs for the commercialisation of the Company's first product.

Comments on expected results of the operations of the Group are included in the Review of Operations on pages 8 to 13.

Further information on likely developments in the operations of the Group and the expected results of operations have not been included in this annual report because the Directors believe it would be likely to result in unreasonable prejudice to the Group.

### Environmental regulation

The Group is not subject to any significant environmental regulations in respect of its operations.

### Information on Directors

The information on the Directors and Secretary is a part of the Directors' Report. Information on the Company Directors, Company Secretary and Key Management Personnel can be found on page 18 to 21 of this Annual Report.

### Directors and Committees of the Board

During the year and to the date of this report, the Board and Committees of the Board of Nanosonics Limited comprised the following members:

Board of Directors Nanosonics Limited	Maurie Stang, Non-Executive Chairman David Radford, Executive Director, CEO David Fisher, Non-Executive Director David Slack, Non-Executive Director (appointed 5 February 2009) Ron Weinberger, Executive Director (appointed 2 July 2008) William Widin, Non-Executive Director (resigned 5 February 2009)
Audit and risk management committee	William Widin, Chairman to 5 February 2009, resigned 5 February 2009. David Fisher, Chairman from 5 February 2009 David Slack, from 5 February 2009 Maurie Stang
Governance and nomination committee	William Widin, Chairman to 5 February 2009, resigned 5 February 2009. David Slack, Chairman from 5 February 2009 David Fisher Maurie Stang
Remuneration committee	William Widin, Chairman to 18 November 2008, resigned 5 February 2009. David Fisher, Chairman from 18 November 2008 Maurie Stang

### Retirement, resignation, appointment and continuation in office of Directors and Secretary

#### (a) Directors

Dr Ron Weinberger was appointed a Director on 2 July 2008. In accordance with the Constitution, both Dr Weinberger and Mr David Radford, who was appointed a Director and CEO on 16 June 2008, retired at the 2008 annual general meeting. Both Mr Radford and Dr Weinberger were re-elected at that meeting and continue in office at the date of this report.

Mr David Slack was appointed a Director on 5 February 2009 and continues in office at the date of this report. In accordance with the Constitution, Mr Slack retires as a Director at the next annual general meeting and, being eligible, offers himself for re-election.

Mr William Widin was a Director from the beginning of the financial year until his resignation on 5 February 2009.

Mr Maurie Stang and Dr David Fisher were Directors at the beginning of the financial year and continue in office at the date of this report. In accordance with the Constitution, Mr Stang retires as a Director at the next annual general meeting and, being eligible, offers himself for re-election.

#### (b) Secretary

Mr Chris Grundy continued as Company Secretary throughout the financial year and to the date of this report.

## Meetings of Directors

The number of Directors' meetings, (including meetings of the Committees), held during the year ended 30 June 2009, and numbers of meetings attended by each of the Directors were as follows:

	Full meetings of Directors		Meetings of committees					
			Audit		Nomination		Remuneration	
	A	B	A	B	A	B	A	B
Maurie Stang	10	10	2	2	1	1	3	3
David Radford	10	10						
David Fisher	10	9	2	1	1	1	3	3
David Slack <sup>1</sup>	4	4						
Ron Weinberger <sup>2</sup>	9	8						
William Widin <sup>3</sup>	6	6	2	2	1	1		

<sup>1</sup> David Slack was appointed 5 February 2009

<sup>2</sup> Ron Weinberger was appointed 2 July 2008

<sup>3</sup> William Widin resigned 5 February 2009

A Number of meetings held during the time the Director held office or was a member of the committee during the year

B Number of meetings attended during the time the Director held office or was a member of the committee during the year

## Loans to Directors and Executives

During the financial year and to the date of this report, the Group made no loans to Directors and other key management personnel and none were outstanding at the year end on 30 June 2009 (2008:nil).

## Share-based payments

Shares issued under the DESP and options granted under the ESOP and GSOP during the year are detailed below. These were part of the Company's long-term incentive plans and also in recognition of the achievements of the Company's personnel and contractors in the commercialisation of its first product, the Trophon EPR ultrasound probe disinfectant.

## Shares issued

During the year ended 30 June 2009 and to the date of this report, the Company issued 1,199,324 (2008: 764,380) new ordinary shares in Nanosonics Limited as detailed below. No amount was unpaid on any of the shares so issued. Further information on the issues is provided in Note 32 to the financial statements.

Shares issued	Number of shares issued
Options exercised under Employee Share Option Plan (ESOP)	561,500
Options exercised under General Share Option Plan (GSOP)	50,000
Shares issued under Deferred Employee Share Plan (DESP)	587,824
<b>Total shares issued</b>	<b>1,199,324</b>

As at 30 June 2009 and at the date of this report there were 196,282,947 (2008: 195,083,623) ordinary shares in Nanosonics Limited on issue. Further information on issued shares is provided in Note 20 to the financial statements.

Share Options granted	Number of options issued
Employee Share Option Plan (ESOP)	2,410,000
General Share Option Plan (GSOP)	220,000
<b>Total share options issued</b>	<b>2,630,000</b>

During the financial year and to the date of this report, the Company granted, for no consideration, 2,630,000 (2008: 445,000) unquoted options over unissued ordinary shares in Nanosonics Limited as detailed below. Further information on the issues is provided in the note 32 to the financial statements.

## Shares under option

At the end of the financial year and at the date of this report, there were 7,548,500 (2008:14,198,560) unissued ordinary shares of Nanosonics Limited under option as detailed below. Further information on the options is provided in Note 32 to the financial statements.

Shares under option	Number of shares under option
Employee Share Option Plan (ESOP)	5,563,500
General Share Option Plan (GSO)	1,985,000
<b>Total share options issued</b>	<b>7,548,500</b>

The options entitle the holder to participate in a share issue of the Company provided the options are exercised on or after their vesting date and prior to the expiry date. No option holder has any right under the options to participate in any other share issue of the Company or any other entity.

### Indemnifying officers or auditor

During the financial year, the Company paid insurance premiums of \$35,418 (2008: \$39,146) to insure the directors and secretary and key management personnel of the Company and its controlled entities.

The liabilities insured are legal costs that may be incurred in defending civil or criminal proceedings that may be brought against the officers in their capacity as officers of entities in the Group, and any other payments arising from liabilities incurred by the officers in connection with such proceedings. This does not include such liabilities that arise from conduct involving a wilful breach of duty by the officers or the improper use by the officers of their positions or of information to gain advantage for themselves or someone else or to cause detriment to the Company. It is not possible to apportion the premium between amounts relating to the insurance against legal costs and those relating to other liabilities.

No indemnities have been given or insurance premiums paid, during or since the financial year, for any person who is or has been an auditor for the Group.

### Proceedings on behalf of the Company

No person has applied to the Court under section 237 of the *Corporations Act 2001* for leave to bring proceedings on behalf of the Company or intervene in any proceedings to which the Company is a party, for the purpose of taking responsibility on behalf of the Company for all or part of those proceedings.

No proceedings have been brought or intervened in on behalf of the Company with leave of the Court under section 237 of the *Corporations Act 2001*.

### Audit and non-audit services

The Company may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the Company and/or the Group are important.

The Board of Directors has considered the position and, in accordance with advice received from the audit committee, is satisfied that the provision of the non-audit services is compatible with the general standard of independence for auditors imposed by the *Corporations Act 2001*.

The directors are satisfied that the provision of non-audit services by the auditor, did not compromise the auditor independence requirements of the *Corporations Act 2001* for the following reasons:

- all non-audit services have been reviewed by the audit committee to ensure they do not impact the impartiality and objectivity of the auditor and
- none of the services undermines the general principles relating to auditor independence as set out in APES 110 *Code of Ethics for Professional Accountants*.

Details of the amounts paid or payable for audit and non-audit services provided by the auditor of the Group, its related practices and non-related audit firms are set out in Note 27 to the financial statements.

### Auditor's Independence declaration

A copy of the auditor's independence declaration as required under section 307C of the *Corporations Act 2001* is included on page 42 of this report.

### Auditor

UHY Haines Norton continues in office as auditor in accordance with section 327 of the *Corporations Act 2001*.

This report, which includes the Review of Operations (on pages 8 to 13), the Information on Directors and Secretary (on pages 18 to 21 and the Remuneration Report (on pages 32 to 41) is made and signed in accordance with a resolution of Directors.



David Fisher  
Director

Sydney  
19 August 2009



The Board of Directors of Nanosonics Limited is responsible for the corporate governance of the Company and of the Group, consisting of the Company and its subsidiaries. The Board regularly reviews the policies and practices applied by the Group to ensure they meet the interests of shareholders and other key stakeholders, both for the present and as the Group progresses its business plans and grows in operational complexity. In developing, updating and applying its corporate governance policies and practices, the Group supports the ASX Listing Rules and the Corporate Governance Principles and Recommendations (2nd Edition, 2007) issued by the Australian Securities Exchange, as well as other prominent guidance on good governance. The Group has followed the ASX Corporate Governance Principles and Recommendations, except as noted below.

A summary of the Group's main corporate governance practices is set out below. Further information is available in the Group's various Charters and Policies, mentioned below, copies of which are available on the Company's website.

## Management and oversight

### Role of the Chairman

The Chairman is responsible for leading the Board, its meetings and Directors, so that all Directors are able to contribute effectively, all matters are properly considered and there is clear decision-making. The Chairman has ultimate responsibility for corporate governance.

### Role of the Board

Under the leadership of the Chairman, the role of the Board is to provide strategic guidance to the Group and to provide effective oversight of its management for the benefit of shareholders and other stakeholders. The Board acts on behalf of shareholders and is accountable to the shareholders for the overall strategy, governance and performance of the Group. The Board retains ultimate authority over the management of the Group; however day-to-day management of the Group's affairs and the implementation of its strategies are formally delegated by the Board to the Chief Executive Officer (CEO) and senior executives. The respective roles and responsibilities of the Board and senior executive, and how they are separate, are set out in detail in the Group's Corporate Governance Charter.

The Board meets regularly in accordance with an agreed schedule and special meetings are held as required. The Board continuously reviews its own performance and mix of skills to ensure that they allow the Board to maximise its effectiveness and contribution to the Group. Directors and the Board have the right, in connection with their duties and responsibilities, to obtain independent professional advice at the Company's expense. Subject to prior approval from within the Board, which will not reasonably be withheld, a Director may have direct access to any employee or contractor of the Group and seek any information from any employee in order to perform his or her responsibilities.

### Committees of the Board

The Board is assisted by Committees which are responsible for aspects of the operation of the Group and which act by examining relevant matters and making recommendations to the Board. The Board may establish additional Committees to assist it in carrying out its responsibilities. The Board may also delegate specified responsibilities to ad-hoc Committees from time to time. The Board expects each Committee to meet as often as necessary to fulfil its obligations. The Directors must be satisfied that the members of the Board's Committees are competent and reliable and will exercise their delegated functions in accordance with Directors' duties. The Board authorises each Committee to seek any information and advice it needs, at the cost of the Company, to assist it in the performance of its obligations. The Committees do not have executive powers in respect of their findings and recommendations. The Board intends that each Committee has an independent director appointed as its Chairman. The membership and performance of Board Committees is assessed at least once every year by those Committees and the Board.

Currently there are three Committees of the Board: the Governance and Nomination Committee, the Audit and Risk Management Committee and the Remuneration Committee. Summaries of the roles and responsibilities of each of the current Committees are provided in this Corporate Governance Statement. Details of Directors' attendances at meetings of the Committees are shown on page 24 of this Annual Report.

### Advisory Board

In addition to the Board Committees, the Board has appointed and is advised by the Company's Advisory Board, which comprises highly qualified experts with an array of skills and

experience relevant to the Group's operations and objectives. The role of the Advisory Board is to provide independent scientific, technical, regulatory and commercial advice and reports to the Board and senior executives on request.

### Senior Executives

The Group sets responsibilities and performance expectations for all senior executives, as described on pages 32 to 33 of this Annual Report. The Nanosonics Performance and Development Program requires peer reviews and individual appraisals by a Director at least annually for all senior executives. In accordance with that program, peer reviews and individual appraisals of the performance of all senior executives were undertaken by the Chief Executive Officer during the year under review in this Annual Report.

### Structure of the Board

The current Board consists of three non-executive directors and two executive directors. The role of the Chairman is separate from that of the Chief Executive Officer.

- Mr Maurie Stang is non-executive Chairman: appointed a Director 14 November 2000, re-elected 26 November 2007
- Mr David Radford is Chief Executive Officer: appointed 16 June 2008, re-elected 18 November 2008
- Dr David Fisher is non-executive Director: appointed 30 July 2001, re-elected 18 November 2008
- Mr David Slack is non-executive Director: appointed 6 February 2009
- Dr Ron Weinberger is executive Director: appointed 2 July 2008, re-elected 18 November 2008

Details of each Director, including their qualifications and experience, are set out in the Information on Directors on pages 18 to 21 of this Annual Report.

### Directors' independence

Directors' independence is assessed according to the provisions set out in the Company's Corporate Governance Charter and in the ASX Corporate Governance Principles and Recommendations. Accordingly:

- Mr M Stang is not considered to be an independent Director as he is a founder of the Company; he held executive office in the Company until March 2007; both he and Mr Bernard Stang, with whom he is associated,

are major shareholders of the Company (see page 79 of this Annual Report) and Mr Maurie Stang is a director and/or shareholder of companies with which the Company had significant transactions during the year (see Note 29f on page 69 of this Annual Report).

- Mr Radford and Dr Weinberger are not considered to be independent Directors as they are executives of the Company.
- Dr Fisher is considered to be an independent Director, except that he served as interim Executive Director for the period 14 December 2007 to 16 June 2008.
- Mr Slack is considered to be an independent Director.

A majority of the Directors is not independent and the Chairman is not an independent Director. The Board intends to appoint one or more suitably qualified and experienced independent Directors. At the time when the Company has appointed other independent Directors, the Board will consider its opportunities to appoint an independent Chairman.

### Governance and Nomination Committee

The three members of the Governance and Nomination Committee are: Mr David Slack (Chairman), Dr David Fisher and Mr Maurie Stang. The Committee comprises a majority of independent directors and is chaired by an independent Director. The role of the Governance and Nomination Committee, as set out in detail in its Charter, is to provide advice and assistance to the Board in fulfilling its responsibilities, by assessing the competencies, performance, composition and succession plans of the Board. If necessary, the Committee makes recommendations to the Board for the appointment and removal of Directors. The Committee is responsible for advising the Board on issues and policies relating to the recruitment, training, performance, evaluation and remuneration of the Directors and for recommending to the Board a framework for the assessment and evaluation of the performance of each Director individually and of the Board as a whole. The performance of the Board, its Committees and the Directors was evaluated during the year.

### Ethical and responsible decision making

#### Code of Ethics

All Directors, executives, employees, advisors, consultants and contractors of the Group are expected to act with integrity and objectivity and to maintain ethical standards

which have been formalised and set out in the Group's Code of Ethics.

### Securities Trading Policy

The Company has a Securities Trading Policy, which applies to all Designated Persons, comprising its Directors, officers, senior management, employees and contractors and such other persons as the Board nominates. Designated Persons may only deal in the Company's securities in terms of that policy. Securities trading "black-out" periods are notified to all Designated Persons. The Company periodically reviews share trading reports and its share register to ensure compliance with the policy.

## Integrity in financial reporting

### Financial systems and compliance

The Chief Executive Officer and Chief Financial Officer have jointly confirmed to the Board that the declaration provided in the 2009 Annual Report in accordance with section 295A of the *Corporations Act 2001* is founded upon sound systems of internal control and that the systems are operating effectively in all material respects in relation to financial reporting risks.

### Audit and Risk Management Committee

The three members of the Audit and Risk Management Committee are: Dr David Fisher BRurSc (Hons), MAppFin, PhD, FFin (Chairman), Mr David Slack BEc, and Mr Maurie Stang. The Committee comprises only non-executive directors with a majority of independent directors. The Committee Chairman is an independent Director who is appropriately qualified and financially literate and who is not also Chairman of the Board.

The role of the Audit and Risk Management Committee, as set out in detail in its Charter, is to provide advice and assistance to the Board in fulfilling its obligations for the Group's audit, accounting and reporting; legal and regulatory compliance; and adequacy of and compliance with risk management policies and procedures. The Committee is responsible for reviewing the integrity of the Group's financial systems and reporting and for overseeing the independence of the Company's external auditor. The Committee is responsible for reviewing the Group's policy on risk management and for advising the Board on the effectiveness of that policy. The Committee regularly reports to the Board on all matters relevant to the responsibilities of the Committee.

## Timely and balanced disclosure

The Company has a written Information Disclosure Policy designed to ensure compliance with the disclosure requirements of the ASX Listing Rules and to ensure individual accountability at senior executive level for that compliance. In considering whether information should be disclosed, the Board takes into consideration the needs and interests of the Group's shareholders and other stakeholders in the context of the Board's obligations under the *Corporations Act 2001* and the ASX Listing Rules. ASX announcements are prepared directly the Board or Executive Management become aware of information required to be disclosed to the market. The announcements are vetted by the Board prior to their release to the market. Apart from the Group's authorised spokespersons, no employee or associated person may comment publicly on matters that are market sensitive or confidential to the Group.

The Information Disclosure Policy is made known to all Directors, executives, employees, advisors, consultants and contractors, who sign confidentiality agreements designed to prevent unauthorised disclosure of information.

## Rights of shareholders

The Company recognises and respects the rights of shareholders and seeks to facilitate the effective exercise of those rights within the limitations of the continuous disclosure provisions of the ASX Listing Rules.

Whilst the Company already practices many aspects of effective communication, it is preparing a formal policy for promoting effective communication with its shareholders and encouraging shareholder participation at general meetings. The policy will be available on the Company's website.

## Website and Corporate information

It is Group policy that its corporate information, is complete, timely and available from its website: [www.nanosonics.com.au](http://www.nanosonics.com.au).

The corporate information, including reports and media releases, governance and shareholder information and at least three years of financial data, is available from its website and includes:

- Announcements to the ASX
- Constitution
- Corporate Governance Charter

- Advisory Board
- Audit and Risk Management Committee Charter
- Code of Ethics
- Governance and Nomination Committee Charter
- Securities Trading Policy
- Remuneration Committee Charter
- Information Disclosure Policy
- Terms of Appointment of non-Executive Director
- Risk Management Policy
- Profiles of Directors and senior management
- Notices of Annual General Meetings
- Annual and half-year reports

### Engagement with shareholders

Shareholders and prospective shareholders are welcome, by prior appointment, to speak with Executive Managers responsible for Investor Relations and to view the Group's operations.

### Risk management

The Group has a Risk Management Policy for the oversight and management of material business risks, which reflects the Group's risk profile and which describes the risk management processes applied. Ultimate responsibility for risk oversight and risk management rests with the Board, which is assisted in its responsibility by the Audit and Risk Management Committee.

The Board requires the Group's Executive Management, led by the CEO, to design, implement and review an effective risk management and internal control system. Executive Management is required to report via the CEO to the Board whether the Group's material business risks are being managed effectively.

In the period under review in this Annual Report, Executive Management has regularly reported to the Board on the effectiveness of the Group's management of its material business risks.

This annual report includes reports on or references to the following risks: strategic planning, IP protection, competition, manufacturing capacity, financial systems and controls, human resources and the environment.

### Fair and responsible remuneration

The Group's remuneration philosophy and policies are set out in the Remuneration Report on page 32 of this Annual Report. The Remuneration Committee oversees remuneration policies and strategies to ensure that performance is rewarded in a manner that is competitive and appropriate for the results delivered.

#### Remuneration Committee

The members of the Remuneration Committee are: Dr David Fisher (Chairman), and Mr Maurie Stang. The Committee comprises a majority of independent directors and is chaired by an independent Director.

The role of the Remuneration Committee, as set out in detail in its Charter, is to provide advice and assistance to the Board in fulfilling its responsibilities in respect of remuneration policies, performance enhancement systems, fair and responsible rewards for individual performance and the performance appraisal of Directors and of the Board as a whole. The Committee is responsible for advising the Board on remuneration issues and policies in the context of the Group's operations and markets and, with regard to the overriding goal that Directors and senior executives are recruited, motivated and retained so as to pursue the long-term growth and success of the Group, for ensuring a clear relationship between individual performance and remuneration structures, both short and long term. The Company will not permit an Executive Director to have direct involvement in the determination of their own remuneration. The Committee also evaluates the time required of non-executive Directors to perform their duties.

The Company distinguishes the structure of non-executive Directors' remuneration from that of executive Directors and senior executives. Non-executive Directors' remuneration does not include any retirement benefits other than contributions to their nominated superannuation funds. Details of the respective remuneration structures are set out in Part 1 of the Remuneration Report on page 32 of this Annual Report.

The Remuneration Report is a part of the Directors' Report.

## 1. Remuneration Policies

Details of Nanosonics Limited's remuneration policies and practices, together with details of remuneration of Directors and Key Management Personnel (KMP), are set out below. For the purposes of this report KMP are defined as those persons having authority and responsibility for planning, directing and controlling the major activities of the company, directly or indirectly and include the five executives receiving the highest remuneration.

### a) Overview of remuneration policies

#### Remuneration Philosophy

Nanosonics recognises that the quality and performance of directors, executives and staff are essential to achieving competitive advantage and a sustainable future. Our remuneration philosophy is to proactively attract, motivate and retain key talent in line with the following criteria:

- Business performance
- Sustainable growth in shareholder wealth
- Transparency of structures for earning rewards
- Individual performance recognition
- Labour market conditions
- Capacity to pay

#### Remuneration Committee

The Remuneration Committee oversees remuneration policies and strategies to ensure that performance is rewarded in a manner that is competitive and appropriate for the results delivered.

The Remuneration Committee presently comprises two non-Executive Directors, Dr David Fisher (Chairman) and Mr Maurie Stang. The Chairman of the Remuneration Committee is required to be an independent Director who is not also Chairman of the Board.

The Remuneration Committee Charter, which is available from the Company's website, provides further information on the role of the Committee.

#### Objective of the Remuneration Policy

In consultation with external remuneration specialists, the Remuneration Committee ensures that rewards align with the achievement of strategic corporate objectives and the creation of value for shareholders, in line with current market practice.

The remuneration structure provides a mix of fixed and variable pay, with a blend of short and long-term incentives. The structure of non-executive and executive compensation is separate and distinct.

### b) Directors

Non-Executive Directors are paid an annual fee for their services on the Board and Committees of the Board. The total annual fee payable to a non-Executive Director is determined on a total cost basis comprising cash, superannuation and securities. The aggregate amount of remuneration that may be paid to all non-Executive Directors and which may be divided among the non-Executive Directors in such a way as the Directors may determine is a maximum of \$500,000 as approved at a general meeting of the Company on 19 September 2006. Non-Executive Directors do not receive any performance-related remuneration, options or shares.

The remuneration of the Chief Executive Officer, and any other Director appointed to an executive office, is fixed by the Directors. Executive Directors are eligible to participate in the Company's short-term incentive scheme and share-based compensation plans. Executive Directors are not separately remunerated for their positions as Directors.

Details of Directors' remuneration are set out in Part 5 of this report.

### c) Advisory board

Members of the Advisory Board are paid an annual fee for their services. The fee is reviewed annually by the Directors. Executive members of the Advisory Board are not separately remunerated for their positions on the Advisory Board.

### d) Executives

Executive pay structures consist of fixed and variable components, incorporating Short Term Incentives (STI) and Long Term Incentives (LTI) as follows:

Remuneration Component	Form of Settlement
Fixed remuneration	Base salary and statutory superannuation
Variable remuneration (STI)	Performance Bonus
Variable remuneration (LTI)	Share-based compensation specifically shares or options

Details of Key Management Personnel remuneration are set out in Part 5 of this report.

### Fixed Remuneration

Fixed remuneration is part of the Total Employment Cost (TEC) package which may be provided as a combination of cash and non-financial benefits, at the executive's discretion.

Executives are offered a competitive fixed component of base pay inclusive of statutory superannuation contributions. Executive remuneration is reviewed on an annual basis by the Remuneration Committee. Part of this review includes an analysis of company and individual performance and external comparative remuneration benchmarking.

#### e) Short term incentive (STI) scheme

The Company has a short-term incentive scheme whereby senior executives and staff can earn cash payments varying from 5% to 25% of their fixed remuneration, subject to the achievement of certain defined key performance indicators and overall company performance.

#### f) Share-based compensation plans

The Company has three share-based compensation plans, each designed to fulfil aspects of the Company's remuneration policy directed to the attraction, motivation and retention of the experience and skills required for the achievement of strategic corporate objectives and the creation of value for shareholders. Summary details of each plan and how it operates are provided in section 3, Share-based compensation below. Specific details of each of the three share-based compensation plans are available on the Company's website.

At the date of this report, the Company is conscious of impending changes to enabling legislation which may result in its current share-based compensation plans requiring amendment or replacement. Wherever practicable, the Company intends to continue to include share-based compensation in its remuneration strategies.

## 2. Service Agreements

On appointment to the Board, all non-executive Directors enter into a service agreement with the Company in the form of a letter of appointment which summarises the Board policies and terms, including compensation, relevant to the office of Director. A copy of the letter is available on the Company's

website. Remuneration and other terms of employment for the CEO, CFO and Key Management Personnel are formalised in employment agreements. Each of these agreements provides for the provision of performance-related cash bonuses and participation, when eligible, in the share-based compensation plans. All employment contracts for Key Management Personnel may be terminated by either party with three months' notice, except in the case of the CEO, where the Company is required to give six months' notice of termination.

## 3. Share-based compensation

The Company has three share-based compensation schemes designed to provide long-term incentives for executives and certain employees to deliver long-term shareholder returns. The schemes are:

- Employee Share Option Plan ("ESOP")
- Exempt Employee Share Plan ("EESP")
- Deferred Employee Share Plan ("DESP")

### 3.1 Nanosonics Employee Share Option Plan ("ESOP").

The establishment of the Nanosonics Employee Share Option Plan (ESOP) was approved by the Directors on 2 April 2007. The ESOP is designed to provide long-term incentives to deliver long-term shareholder returns. All employees and executive directors are eligible to participate in the ESOP. Participation in the plan is at the Board's discretion and no individual has a contractual right to participate in the plan or to receive any guaranteed benefits. The maximum number of options able to be on issue under the ESOP during any five-year period is 5% of the total number of shares on issue. Under the plan, participants are granted options for no consideration which vest in three equivalent tranches on each of the first three anniversaries of the date of issue. The options expire on the fourth such anniversary. The exercise price of options is determined by the Board at the time of issue. Options vest and become exercisable at the end of each vesting period. The ESOP requires the holder to be an employee of the Company at the time vested options are exercised, except that they may be exercised up to 30 days after voluntary termination of employment. When exercisable, each option is convertible into one ordinary share which ranks equally with any other share on issue in respect of dividends and voting rights.



### 3.2 Nanosonics Employee Share Plans (“EESP” & “DESP”)

The Company has two Employee Share Plans, being the Exempt Employee Share Plan (“EESP”) and the Deferred Employee Share Plan (“DESP”).

Adoption of the EESP and DESP was approved at a general meeting of shareholders on 26 November 2007 and the approval is for a period of 3 years ending 26 November 2010. Shareholder approval was also granted on 26 November 2007 to enable the Company to grant financial assistance under both the EESP and the DESP in accordance with the *Corporations Act 2001*.

The issue price for shares granted is calculated as the 5-day weighted average market price of shares of the Company on the Australian Securities Exchange as at close of trading on the date the shares were granted. The fair value of shares granted is taken to be the issue price.

In any one financial year, employees, including Directors, may participate in only one of the EESP and DESP to the exclusion of the other.

#### Nanosonics Exempt Employee Share Plan (“EESP”)

The EESP enables eligible employees, including Directors, to acquire up to \$1,000 worth of Nanosonics shares each year on a tax-exempt basis in accordance with enabling tax legislation. As a contemporary company the Board believes allowing employees to acquire equity in the Company on tax-preferred terms should be encouraged.

No shares have been issued under the EESP to the date of this report.

#### Nanosonics Deferred Employee Share Plan (“DESP”)

The DESP allows invited eligible employees, including Directors, to receive Nanosonics shares as a bonus or incentive or as remuneration sacrifice and, subject to certain conditions and impending changes to legislation, not to pay tax for up to 10 years on the benefit in accordance with enabling tax legislation. The DESP is designed to allow the Company to meet contemporary executive equity incentive practices.

Shares were issued under the DESP during the financial year.

Details of share-based compensation included in Director and Key Management Personnel remuneration are set out on page 71 and in Note 32 to the Financial Report.

## 4. Directors and Key Management Personnel

All the Directors and Key Management Personnel named in this report held office throughout the years ended 30 June 2009 and 30 June 2008, except for:

#### Directors

David Radford – Executive Director and CEO (appointed 16 June 2008)

Ron Weinberger – Executive Director (appointed a Director 2 July 2008, has held executive office since 9 August 2004)

William Widin – Non-executive Director (resigned 5 February 2009)

David Slack – Non-executive Director (appointed 5 February 2009)

Geoff Marchall - Executive Director and CEO (resigned 14 December 2007)

#### Key Management Personnel

Arjang Safa – General Manager Manufacturing and Supply Chain (appointed 1 January 2008)

Rachael Moore – General Manager Product Development (resigned 3 April 2009)

Ole Stockhausen – General Manager Global Marketing and Business Development (resigned 18 May 2009)

John Murtagh – General Manager Business Systems and Regulatory Affairs (resigned 26 June 2009)

Jianhe Chen - Quality Assurance Manager (appointed 20 July 2009)

## 5. Remuneration of Directors and Key Management Personnel

Details of the nature and amount of each major element of the remuneration of each Director of the Company and each of the five highest remunerated Company executives are set out below. No Directors or Key Management Personnel were remunerated by any other company in the Group. The aggregate remuneration for Non-Executive Directors for the current financial year was within the aggregate amount of \$500,000 approved at a general meeting of the Company on 19 September 2006.

Directors	Primary		Post-employment	Equity compensation	Other compensation		Total	Proportion of remuneration performance related %	Value of shares and options as proportion of remuneration %	Short term incentive bonus		
	Salary and fees	STI cash bonus (a)			Non monetary benefits	Termination benefits				Vested in year %	Forfeited in year (b) %	
<b>Non-Executive Directors</b>												
Maurie Stang	2009	50,007					\$50,007					
	2008	50,004					\$50,004					
David Fisher <sup>1</sup>	2009	36,386	3,274				39,660					
	2008	93,202	8,281				\$101,483					
William Widlin <sup>2</sup>	2009	20,451	1,829				\$22,280					
	2008	37,727	3,395				\$41,122					
David Slack <sup>3</sup>	2009	12,702	1,143				\$13,845					
	2008	-	-				-					
<b>Executive Directors</b>												
David Radford <sup>4</sup>	2009	232,375	48,153	16,574	14,092		\$311,194	25.0%	4.5%	100%	0%	0%
	2008	5,235	471		-		\$5,706	0.0%	0.0%	0%	0%	0%
Ron Weinberger <sup>5</sup>	2009	155,963	28,687	16,393	93,838		\$294,881	22.5%	31.8%	100%	0%	0%
	2008	156,779	33,108	12,570	84,275		\$286,732	20.0%	29.4%	100%	0%	0%
Geoff Marshall <sup>6</sup>	2008	118,730	24,000	9,492	(25,764)		\$206,077	19.0%	29.4%	80%	20%	20%
<b>Key Management Personnel</b>												
Ole Stockhausen <sup>7</sup>	2009	79,204	11,263	7,102	5,310		\$102,879	22.5%	0.0%	0%	100%	100%
	2008	129,682	29,430	11,179	43,054		\$213,345	21.0%	20.2%	100%	0%	0%
Rachael Moore <sup>8</sup>	2009	54,707	19,760	4,923	(18,005)	36,431	\$97,816	13.0%	0.0%	100%	0%	0%
	2008	129,500	29,430	11,175	23,085		\$193,190	21.0%	11.9%	100%	0%	0%
John Murtagh <sup>9</sup>	2009	142,857	17,325	14,274	(20,509)		\$153,947	15.0%	13.3%	100%	100%	100%
	2008	127,839	25,296	10,846	21,085		\$185,066	18.0%	11.4%	100%	0%	0%
Chris Grundy	2009	161,827	27,387	13,745	41,106		\$244,065	22.5%	16.8%	100%	0%	0%
	2008	150,636	40,772	13,820	30,867		\$236,095	22.5%	13.1%	100%	0%	0%
Arjang Safa <sup>10</sup>	2009	159,228	26,149	14,315	44,635		\$244,327	22.5%	18.3%	100%	0%	0%
	2008	73,183	2,538	5,501	34,395		\$115,617	3.0%	29.7%	100%	0%	0%

(a) Amounts included in remuneration under the Short Term Incentive (STI) Scheme comprise amounts that vested in the financial year based on achievement of personal goals and specified performance criteria set out in Part 1. Certain amounts may vest in future financial years in respect of the STI scheme for the current financial year.

(b) Amounts forfeited in the financial year relate to personal key performance indicators that were not achieved in the year.

1 David Fisher's 2008 remuneration includes fees amounting to \$77,775 for acting as Executive Director for the period December 2007 to June 2008.

2 William Widlin resigned on 5 February 2009.

3 David Slack was appointed on 5 February 2009.

4 David Radford was appointed on 16 June 2008.

5 Ron Weinberger was appointed a Director on 2 July 2008. His 2008 remuneration is as part of Key Management Personnel.

6 Geoff Marshall resigned on 14 December 2007. All options previously granted had not vested at that date and these lapsed.

7 Ole Stockhausen resigned on 18 May 2009. All options not vested or exercised within 30 days of that date lapsed.

8 Rachael Moore resigned on 3 April 2009. All options not vested or exercised within 30 days of that date lapsed.

9 John Murtagh resigned on 26 June 2009. All options not vested or exercised within 30 days of that date lapsed.

10 Arjang Safa was appointed on 1 January 2008.

## 6. Fair value of share-based compensation

### Shares

The issue price for shares granted during the year is calculated as the 5-day weighted average market price of shares of the Company on the Australian Securities Exchange as at close of trading on the date the shares were granted. The fair value of shares granted during the year is taken to be the issue price. This amount is allocated to remuneration in the period the shares are granted, unless the shares have a vesting condition, in which case this amount is allocated to remuneration evenly over the vesting period and a share based payments reserve is created as part of shareholders' equity.

### Options

The fair value of options granted during the year is the value calculated at grant date. A share based payments reserve is created as a part of shareholders' equity. Using a Black-Scholes option pricing model and allocated to each reporting period evenly over the period from grant date to vesting

date. The value disclosed is the portion of the fair value of the options allocated to this reporting period. In valuing the options market conditions have been taken into account in both the current and prior periods. Comparative information is not restated as market conditions were already included in the valuation.

The value of options exercised during the year is calculated as the market price of shares of the Company on the Australian Securities Exchange as at close of trading on the date the options were exercised after deducting the price paid to exercise the options.

The value of options which lapsed during the year represents the benefit forgone and is calculated at the date the option lapsed using a Black-Scholes model with no adjustments for whether the performance criteria have or have not been achieved.

The following factors and assumptions were used in determining the fair value on grant date of options granted to Directors and Key Management Personnel which were unexpired on 30 June 2009:

Option type	Grant date	Expiry date	Share price at grant date	Exercise price	Estimated volatility	Risk free interest rate	Value of option
ESOP	26 June 2009	26 Jun 2013	\$0.410	\$0.345	59.06%	5.32%	\$0.226
ESOP	17 June 2009	17 Jun 2013	\$0.410	\$0.30	58.75%	5.01%	\$0.299
ESOP	19 Nov 2008	19 Nov 2012	\$0.190	\$0.30	51.58%	4.24%	\$0.876
ESOP	30 Nov 2007	30 Nov 2011	\$0.715	\$0.75	46.02%	6.27%	\$0.301
ESOP	17 July 2007	17 July 2011	\$0.690	\$0.75	45.73%	6.40%	\$0.280
ESOP	17 April 2007	17 April 2011	\$0.375 <sup>11</sup>	\$0.75	45.73%	6.17%	\$0.155
ESOP	17 April 2007	17 April 2011	\$0.375 <sup>11</sup>	\$0.20	45.73%	6.17%	\$0.355

<sup>11</sup> The grant date of the options preceded the Company's admission to the Australian Securities Exchange on 17 May 2007 and an estimated share price at grant date has been applied.

## 7. Share-based compensation granted as remuneration

### Shares granted

Shares granted as long-term incentive remuneration under the Company's Deferred Employee Share Plan (DESP) to each Director and each of the Key Management Personnel are detailed below.

	Share plan, issue price	Number granted	Date granted	Number vested	Number forfeited	Number vesting in future financial years <sup>11</sup>		
						2010	2011	2012
<b>Directors</b>								
David Radford	DESP@\$0.425	5,880	June 2009	5,880	–	–	–	–
	DESP@\$0.288	23,237	Mar 2009	23,237	–	–	–	–
Ron Weinberger	DESP@\$0.425	75,000 <sup>13</sup>	June 2009	–	–	25,000	25,000	25,000
	DESP@\$0.288	33,203	Mar 2009	33,203	–	–	–	–
<b>Key Management Personnel</b>								
John Murtagh <sup>4</sup>	DESP@\$0.288	20,052	Mar 2009	20,052	–	–	–	–
Chris Grundy	DESP@\$0.425	5,880	June 2009	5,880	–	–	–	–
	DESP@\$0.288	26,875	Mar 2009	26,875	–	–	–	–
Arjang Safa	DESP@\$0.425	5,880	June 2009	5,880	–	–	–	–
	DESP@\$0.288	33,203	Mar 2009	33,203	–	–	–	–

### Options granted

The vesting profiles as at 30 June 2009 of options granted under the Company's Employee Share Option Plan (ESOP) and General Share Option Plan (GSOP) as long-term incentive remuneration to each Director and each of the Key Management Personnel are detailed below.

	Option Plan, exercise price	Number granted	Date granted	Number vested	Number exercised	Number forfeited	Number vesting in future financial years <sup>12</sup>		
							2010	2011	2012
<b>Directors</b>									
David Slack	GSOP@\$0.30	50,000	Nov 2008	–	–	–	16,500	16,500	17,000
David Radford	ESOP@\$0.30	500,000	June 2009	–	–	–	165,000	165,000	170,000
	ESOP@\$0.30	500,000	Nov 2008	165,000	–	–	165,000	170,000	–
Ron Weinberger	ESOP@\$0.75	175,000	April 2007	115,500	–	–	59,500	–	–
	ESOP@\$0.20	1,000,000	April 2007	660,000	–	–	340,000	–	–
<b>Key Management Personnel</b>									
Ole Stockhausen <sup>15</sup>	ESOP@\$0.75	125,000	April 2007	82,500	–	125,000	–	–	–
	ESOP@\$0.20	500,000	April 2007	330,000	330,000	170,000	–	–	–
Rachael Moore <sup>16</sup>	ESOP@\$0.75	290,000	April 2007	95,700	–	290,000	–	–	–
	ESOP@\$0.20	200,000	April 2007	66,000	66,000	134,000	–	–	–
John Murtagh <sup>14</sup>	ESOP@\$0.75	290,000	April 2007	191,400	–	290,000	–	–	–
	ESOP@\$0.20	175,000	April 2007	115,500	115,500	59,500	–	–	–
Chris Grundy	ESOP@\$0.345	100,000	June 2009	–	–	–	33,000	33,000	34,000
	ESOP@\$0.75	250,000	July 2007	82,500	–	–	82,500	85,000	–
Arjang Safa	ESOP@\$0.345	350,000	June 2009	–	–	–	115,500	115,500	119,000
	ESOP@\$0.75	80,000	Nov 2007	26,400	–	–	26,400	27,200	–

<sup>12</sup> In terms of the rules of the DESP and ESOP, shares and options will vest only if the holder is an employee of the Group on the vesting date. All options expire on the fourth anniversary of the grant date.

<sup>13</sup> Shares issued to Ron Weinberger as part of the Company's long term incentive plans. The shares vest in three equal tranches annually commencing 26th June 2010 and are forfeitable if the holder ceases employment before the vesting date.

<sup>14</sup> John Murtagh resigned on 26 June 2009. All options not vested or exercised within 30 days of that date were forfeited.

<sup>15</sup> Ole Stockhausen resigned on 18 May 2009. All options not vested or exercised within 30 days of that date were forfeited.

<sup>16</sup> Rachael Moore resigned on 3 April 2009. All options not vested or exercised within 30 days of that date were forfeited.

## 8. Movements in share-based compensation

### Shares

Details of shares granted as incentive remuneration to each Director of the Company and each of the other Key Management Personnel named are detailed below.

Shares	Value of shares		
	Granted in year \$	Forfeited in year <sup>17</sup> \$	
<b>Directors</b>			
David Radford	2009	9,192	–
	2008	–	–
Ron Weinberger	2009	41,445	–
	2008	–	–
<b>Key Management Personnel</b>			
John Murtagh <sup>21</sup>	2009	5,775	–
	2008	–	–
Chris Grundy	2009	10,240	–
	2008	–	–
Arjang Safa	2009	12,062	–
	2008	–	–

## Options

Details of the movement during the reporting period, by value, of options granted as long-term incentive remuneration to each Director of the Company and each of the other Key Management Personnel named are detailed below.

Options	Value of options		
	Granted in year (a) \$	Exercised in year \$	Forfeited in year <sup>16</sup> \$
<b>Directors</b>			
David Slack	2009	2,938	–
	2008	–	–
David Radford	2009	179,916	–
	2008	–	–
Ron Weinberger	2009	–	–
	2008	–	–
Geoff Marshall <sup>18</sup>	2009	–	–
	2008	–	25,764
<b>Key Management Personnel</b>			
Ole Stockhausen <sup>19</sup>	2009	–	58,850
	2008	–	–
Rachael Moore <sup>20</sup>	2009	–	7,920
	2008	–	–
John Murtagh <sup>21</sup>	2009	–	34,755
	2008	66,650	–
Chris Grundy	2009	22,300	–
	2008	70,000	–
Arjang Safa	2009	78,049	–
	2008	24,086	–

17 In terms of the rules of the DESP and ESOP, shares and options will vest only if the holder is an employee of the Group on the vesting date.

18 Geoff Marshall resigned on 14 December 2007. All options not vested or exercised within 30 days of that date were forfeited.

19 Ole Stockhausen resigned on 18 May 2009. All options not vested or exercised within 30 days of that date were forfeited.

20 Rachael Moore resigned on 3 April 2009. All options not vested or exercised within 30 days of that date were forfeited.

21 John Murtagh resigned on 26 June 2009. All options not vested or exercised within 30 days of that date were forfeited.

a The total value of options granted in the year is shown in the table above. This amount is assessed and allocated to remuneration over the vesting period.

The shareholder information set out below was applicable as at 13 August 2009.

## A. Equity security holders

Twenty largest holders of quoted equity securities.

The names of the twenty largest holders of quoted securities are shown below.

Ordinary shares	Quoted shares Number held	Percentage of issued shares
Bernie Stang	28,540,333	14.5%
Maurie Stang	28,365,333	14.5%
Steve Kritzler	22,364,333	11.4%
JP Morgan Nominees Australia Limited	5,619,675	2.9%
National Nominees Limited	5,425,796	2.8%
Australian Biotechnology and Healthcare fund No 3 Limited	4,148,980	2.1%
3M Company	4,000,000	2.0%
Towns Corporation Pty Ltd	3,543,409	1.8%
ANZ Nominees Limited	3,093,547	1.6%
Cogent Nominees Pty Ltd	2,852,292	1.5%
Kefford Holdings Pty Ltd	2,393,580	1.2%
UBS Nominees Pty Ltd	2,250,000	1.1%
Asia Union Investments Pty Ltd	2,200,000	1.1%
Australian Biomedical Fund No 1 Limited	2,024,568	1.0%
Australian Biomedical Fund No 2 Limited	1,910,241	1.0%
HSBC Custody Nominees (Australia) Limited	1,812,908	0.9%
Darlington Weir Pty Ltd	1,785,000	0.9%
Bennelong Resources Pty Ltd	1,500,000	0.8%
Simon Magasanik	1,331,398	0.7%
Bevan Holdings Pty Ltd	1,262,487	0.6%
<b>Totals top 20 holders</b>	<b>126,414,880</b>	<b>64.4%</b>
<b>Total all other holders</b>	<b>69,868,067</b>	<b>35.6%</b>
<b>Total shares on issue</b>	<b>196,282,947</b>	<b>100.0%</b>

## Unquoted equities securities

	Number of options over ordinary shares	Number of holders
<b>Options granted</b>		
General Share Options to take up unissued ordinary shares	1,985,000	22
Employee Share Options to take up unissued ordinary shares	5,563,500	32

**B. Distribution of equity securities**

Analysis of numbers of ordinary shares and options by size of holding:

	Quoted ordinary shares	Unquoted options
1 – 1,000	39	–
1,001 – 5,000	288	9
5,001 – 10,000	280	–
10,001 – 100,000	697	50
100,001 and over	165	16
<b>Total Holders</b>	<b>1,469</b>	<b>75</b>

There were 48 holders of less than a marketable parcel of ordinary shares.

**C. Substantial holders**

Substantial holders in the Company are shown below:

	Number of ordinary shares	Percentage of total ordinary shares
Bernie Stang	28,540,333	14.5%
Maurie Stang	28,365,333	14.5%
Steve Kritzler	22,364,333	11.4%

**D. Voting rights**

The voting rights attaching to each class of equity securities are set out below:

## (a) Ordinary shares including restricted ordinary shares

On a show of hands every member present at a meeting in person or by proxy shall have one vote and on a poll each share shall have one vote.

## (b) Options

Options have no voting rights.

510(k)	Premarket Notification to the FDA, under Section 510(k) of the Food Drug and Cosmetic Act, of intent to market a medical device in the USA.
AASB	Australian Accounting Standards Board
AGM	Annual General Meeting
ANZ	Australia and New Zealand
APES	Standards issued by the Accounting Professional & Ethical Standards Board (APESB)
ASX	Australian Securities Exchange Limited
BBSW	Bank bill swap reference rate
CDC	Centers for Disease Control (USA)
CEO	Chief Executive Officer – Mr David Radford
CFO	Chief Financial Officer – Mr Chris Grundy
<i>Clostridium difficile</i>	A bacterium, the most common cause of infectious diarrhoea in hospitals and long-term care homes
Company	Nanosonics Limited
Date of this report	19 August 2009
DESP	Deferred Employee Share Plan
EESP	Exempt Employee Share Plan
EN15883	A Standard, also known as HTM2030, for the testing of Washer Disinfectors for surgical instruments, including endoscopes, to ensure they are operating correctly
EPS	Earnings Per Share
ERP	Enterprise Resource Planning
ESOP	Employee Share Option Plan
FDA	Food and Drug Administration - USA
Financial Year	Year to 30 June
Fiscal Year	Year to 30 June
Group	Nanosonics Limited and its wholly owned subsidiary companies
GSOP	General Share Option Plan
GST	Goods and Services Tax
HLD	High Level Disinfection
HLD+	High Level Disinfection Plus, including sporicidal efficacy - Nanosonics new dimension of disinfection based on the Company's platform technologies
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
IP	Intellectual Property
ISO 13485	Quality Management System for Medical Devices – Requirements for Regulatory Purposes
IVF	In-vitro fertilisation
KMP	Key Management Personnel (excludes non-Executive Directors)
LTI	Long Term Incentive
MRSA	Methicillin resistant staphylococcus aureus, a bacterium resistant to broad spectrum antibiotics
NanoNebulant®	The biocide used in Nanosonics' technological process
Q 1, 2, 3, 4	3-month periods beginning 1 July, 1 October, 1 January and 1 April respectively
O&G	Obstetric & Gynaecology
PCT	Patent Co-operation Treaty
Reporting period	Year to 30 June 2009
RoHs compliant	Restriction of use of Hazardous Substances
S+	Sterilisation Plus, including prionicidal efficacy - Nanosonics new dimension of sterilisation based on the Company's platform technologies
STI	Short Term Incentive
TEC	Total Employment Cost
TEE	Transoesophageal Echocardiogram, a type of probe
TGA	Therapeutic Goods Administration – Australia
Trophon®	The brand representing Nanosonics' range of infection control solutions designed specifically for healthcare settings
Trophon EPR	The brand of Nanosonics' device specifically designed to disinfect intracavity and surface ultrasound probes. See also <a href="http://www.trophon.com.au">www.trophon.com.au</a>
VAT	Value Added Tax

**Nanosonics Limited**

ACN 11 095 076 896  
Incorporated 14 November 2000

**Directors**

Maurie Stang  
David Radford  
David Fisher  
David Slack  
Ron Weinberger

**Secretary and Chief Financial Officer**

Chris Grundy

**Registered Office**

Unit 24, 566 Gardeners Road  
Alexandria NSW 2015 Australia  
Ph: +61 2 8063 1600

**German Office**

Nanosonics Europe GmbH  
Falkenried 88. House E  
D-20251 Hamburg Germany  
Ph: +49 40 298 67308

**Share Register**

Computershare Investor Services Pty Ltd  
Level 2, 45 St Georges Terrace  
Perth WA 6000 Australia  
GPO Box D182  
Perth WA 6840 Australia  
Ph: +61 8 9323 2000  
Ph: 1300 557 010 (within Australia)  
Fax: +61 8 9323 2033  
[www-au.computershare.com](http://www-au.computershare.com)

**Investor Relations**

Computershare Investor Services Pty Ltd  
Ph: +61 8 9323 2000  
Ph: 1300 557 010 (within Australia)  
  
Chris Grundy – Company Secretary  
Ph: +61 2 8063 1600  
Email: [info@nanosonics.com.au](mailto:info@nanosonics.com.au)

**Auditor**

UHY Haines Norton  
Level 11, 1 York Street  
Sydney NSW 2000 Australia

**Legal Advisors**

Shelston IP  
Level 21, 60 Margaret Street  
Sydney NSW 2000 Australia

**Spruson & Ferguson**

Level 35, St Martins Tower,  
31 Market Street  
Sydney NSW 2000 Australia

**Palaschinski & Partner**

Neuer Wall 44  
Hamburg 20354 Germany

**Bankers**

ANZ Banking Group Limited  
Level 1, 20 Martin Place  
Sydney NSW 2000 Australia

**Deutsche Bank AG**

Eppendorfer Landstrasse 70  
Hamburg 20249 Germany

**Stock Exchange Listings**

Nanosonics Limited shares are listed on the Australian Securities Exchange Limited (ASX)

ASX code: NAN

Industry Group: Healthcare Equipment & Services

**and on the**

German Stock Exchanges at Frankfurt and Xetra, Symbol: OQS

**2009 Annual General Meeting**

The 2009 AGM of Nanosonics Limited will be held:

At 4.15pm on Wednesday 4th November 2009

At Level 47, MLC Centre, 19 Martin Place, Sydney NSW Australia

**Website Address**

[www.nanosonics.com.au](http://www.nanosonics.com.au)





Nanosonics Limited

Unit 24, 566 Gardeners Road  
Alexandria NSW 2015 Australia

T +61 2 8063 1600  
E [info@nanosonics.com.au](mailto:info@nanosonics.com.au)

[www.nanosonics.com.au](http://www.nanosonics.com.au)