nanostart®
INVESTMENTS

creating value through
nanotechnology

Annual Report 2009

Nanostart office locations

MAIN OFFICE

Nanostart AG
Goethestrasse 26-28
D-60313 Frankfurt
Germany
T +49 (0)69-2193 96 00
F +49 (0)69-2193 96 150

BERLIN BRANCH

Nanostart AG
Bleibtreustrasse 24
D-10707 Berlin
Germany
T +49 (0)30-8891897 29
F +49 (0)30-8891897 28

SUBSIDIARY IN SINGAPORE

Nanostart Asia Pte Ltd
Level 42
Suntec Tower Three
8 Temasek Boulevard
Singapore 038988
T +65 (0)6829-2194
F +65 (0)6829-2121

YEAR FOUNDED

2003

CHIEF EXECUTIVE OFFICER

Marco Beckmann

SUPERVISORY BOARD

Dr. Alfred Krammer (chairman)

Professor Wolfgang M. Heckl (deputy chairman)

Achim Lindner

INDUSTRY/AREA OF SPECIALIZATION

Nanotechnology venture capital finance

PORTFOLIO COMPANIES*

BioMers Pte Ltd, Singapore

BioMicro Systems Inc., Salt Lake City, Utah, USA

Curiox Biosystems Pte Ltd, Singapore

Holmenkol AG, Heimerdingen, Germany

ItN Nanovation AG, Saarbrücken, Germany

Lumiphore Inc., Richmond, California, USA

MagForce Nanotechnologies AG, Berlin, Germany

Namos GmbH, Dresden, Germany

NanoGram Corporation, Milpitas, California, USA

Nanosys Inc., Palo Alto, California, USA

PREFERRED INVESTMENT SIZE

Generally EUR 1 to 10 million per portfolio company

NET ASSET VALUE (NAV) OF PORTFOLIO HOLDINGS*

EUR 140 million

*as of April 30, 2010

CEO OF NANOSTART AG

Marco Beckmann

Dear Shareholders,

Henry Ford once said that success comes from having the right skills just when they are needed. There is no doubt in my mind that this applies to Nanostart right now. The first-mover position where we presently find ourselves, however, comes from much more than just good luck. We have exactly the skills which are in demand because we recognized the enormous potential of nanotechnology at a very early stage and have focused on it relentlessly. It is for this reason that Nanostart today finds itself in its preeminent global position, and our growing track record of success after success proves that we remain on the right path.

2009 was indeed yet another very good year for Nanostart. It was a year in which our company took strategic steps forward against a backdrop of solid business performance. We further cemented our position as the world's leading nanotechnology investor. We once again ended the year with a profit, despite the fact that we are still in the phase of building our portfolio, and despite the fact that the exit transactions which we anticipate to be most profitable still lie ahead of us. One important measure of our investment success over the past fiscal year is the growth in the recorded value of our investment holdings – our net asset value. And this grew nicely in the course of 2009, from EUR 103 million at the start of the year to EUR 132 million at year end.

The nanotechnology revolution has already begun

The reason for our success is quite simply nanotechnology, which is the essence of our business. Right now, nanotechnology is in the process of leading our economy and our society into a new age, comparable to the steam engine which, some 250 years ago, marked the start of the Industrial Revolution. This technological breakthrough liberated mankind from the constraints of hard manual labor, leading to enormous increases in life expectancy and quality of life. Today it is nanotechnology which is the new "steam engine", holding out the keys to unlock some of the most pressing challenges facing our planet. Nanotechnology enables entirely new approaches to fighting diseases which have until now eluded scientists, to solving global shortages of energy and water, and to protecting our natural environment. These, however, are but three of countless examples: Nanotechnology will lead to improvements in virtually every area of life. In fact, with nanotech already finding transformational applications across all kinds of industries, even the most global industries, this is already happening now. The diverse products and processes could hardly be more different from each other, but all are based on the same principle: that the smallest building blocks of matter – atoms and molecules – can be manipulated and structured in a controlled way.

▶

So for us, there was also never any question that we can only succeed by acting globally. We scrutinize nanotechnology, its markets and its technological innovations wherever they occur around the planet. Our portfolio spans the geographical regions in which nanotechnology is most active: Europe, North America and Asia. We enjoy a close network of contacts within universities and research institutions, with company founders and major global corporations, and with key government agencies in countries which recognize nanotechnology as an important driver of growth in their national economies. We have a comprehensive global view across the latest advances in nanotechnology and generally enjoy good access in terms of being able to identify the most promising up-and-coming companies in high-growth industries, to examine them in depth, and ultimately to invest in the best of these. The nanotechnology-based companies in our investment portfolio offer pioneering new solutions to major challenges. Some of these products and processes have already been successfully commercialized, while others stand shortly before market launch.

Among these are companies like ItN Nanovation, which with its nanoceramic filtering technology – unique throughout the world – offers desperately needed breakthrough solutions for water treatment, and Curiox Biosystems, which has developed a revolutionary process for analyzing aqueous biosamples which offers not only better data quality but also reduces the amount of sample and reagent needed by up to 98 percent while cutting analysis time by more than half. And perhaps the most exciting of our portfolio companies is MagForce Nanotechnologies, which at the end of 2009 announced the successful completion of clinical trials of its Nano-Cancer® therapy on patients suffering from glioblastoma, a particularly aggressive type of brain tumor, and submitted its application for EU regulatory approval following more than 20 years of intensive research and development efforts. As I write this letter, we await the regulatory approval which will now clear the way to market launch.

Successful track record and global reach

These are just three shining examples of the ten companies currently within our investment portfolio which we will present to you, as every year, in this annual report. “Exits”, generally in the form of trade sales or stock offers, are an essential part of the venture capital business, and we are immensely proud of our track record of seven successful exit transactions to date, more than any other nanotechnology investment company. A recent example is the asset sale of the primary product line of our U.S. portfolio company BioMicro Systems to global pharmaceutical giant Roche in the spring of this year. This transaction is both an affirmation of our business model, built on the disciplined commercialization of nanotechnology-based products and processes, and a case example of the power of nanotechnology to solve major challenges long faced by industries.

In the United States, our portfolio, with its strengths in life sciences/healthcare and cleantech, is ideally positioned to benefit from current government policies and priorities. The U.S. is a tremendously important market, and our portfolio holdings there are attracting interest from major world corporations, as the asset sale to Roche demonstrates.

Halfway around the planet, our business in the Asian region is blossoming, particularly in Singapore. The Asian markets are booming, with economies which are vibrant and sophisticated. Leaders there in both business and government, with their practical and goal-oriented mindset, have long recognized the momentous importance of nanotechnology. Singapore, one of the most forward-thinking, has declared nanotechnology a national objective and is providing massive government support to cement the country's position as a southeast Asian nanotechnology hub. As nanotechnology investment partner to the government Singapore, we positioned ourselves to be in the right place at the right time, having selected Singapore already in 2008 as the home of our subsidiary, Nanostart Asia. We have an excellent network of contacts there, helping us to find companies at an early stage while their valuations are still low. Because of our early commitment, we enjoy a "first mover" advantage in this pivotal nanotechnology hub. It is, in fact, hard to imagine how our position there could be any better. At the end of 2009, we entered into our second portfolio investment in Singapore: BioMers, a remarkable company which stands to revolutionize the global orthodontics industry by replacing unsightly metal braces with translucent super-strong wires made possible by nanotechnology.

2009, a year of economic and financial crisis throughout the world, was not entirely without disappointment. In the U.S., hit hard by the crisis, we had to write off one of our investments. The company, NanoDynamics, was unable to cover its capital requirements in the tough market environment. Our shareholding in the company was only 1.5 percent and thus was a loss we could absorb. It must also be acknowledged that venture capital investment inherently involves risk, and not every investment which is made will ultimately pay off.

Growing recognition for Nanostart

Through the ever increasing importance of nanotechnology as a whole as well as our own successes, we have been attracting ever more attention and interest in the nanotechnology world, in the general and financial media, and on the capital markets. Good ideas often take on a life of their own, and we are immensely gratified to see that things that we first put into motion now continue to move forward on their own momentum. We are also pleased at the marked growth of investment interest in Nanostart AG within the U.S., the world's largest capital market, following the 2009 Nasdaq market launch of A123 Systems, the first big-ticket IPO of a nanotechnology-based company. We are very aware

▸

of the growing interest in nanotechnology among U.S. investors, with whom we are in constant dialog. We are now preparing initial steps to better address the U.S. capital market, and here too, we see a bright future ahead of us.

We only work with the best

As the chief executive of this company, it is my task and my obligation to consider the well-being of this company and of you, its shareholders, in each and every decision I make. As the head of our investment team, I have the final say in which investments we undertake, and in what levers to pull as we help our existing portfolio companies drive forward to successful commercialization. It is my task to decide on the allocation of our financial capital as well as our human resources, and to make key decisions about our risk management and investor relations activities. It is a source of great personal pride for me to see Nanostart having firmly established itself as the world's preeminent nanotechnology investment company. This has only been possible through the high standards and attention to quality which Nanostart applies in selecting its investments, and through the professionalism and competent execution which is so evident both in our current business activities and in what we have already achieved.

A company, however, is only as good as the people who work there. There can be no doubt that, without our top-notch staff who carry out these decisions and who conduct our day-to-day business, we would never be where we are today. The demands which we place on each and every one of our employees, in terms of both performance and commitment, are high. Those who thrive in our company do so because they are the best. Our investment teams go to extraordinary lengths to ensure that our portfolio companies meet their growth objectives, supporting them with their business know-how and commercialization expertise, and stepping in to help achieve goals. These are the people who nurture these highly promising technology companies, financially and strategically. They lay the foundation upon which extraordinary success and value growth can be built. They are seasoned investment managers who bring many years of experience with some of the largest and most renowned names in private equity, supplemented with young, ambitious professionals with exceptional qualifications.

But it is not only our investment teams who stand out. The rest of our staff displays a level of commitment and competence which likewise contributes to our business success, amplified by our lean organizational structure and the open, candid communication with those who undertake key decisions. Our lean organization also means a minimum of overhead and a focus on what matters: our core business. The experts who we bring in to help us evaluate new investment opportunities are the best in their respective areas. In addition, we are fortunate to have steadfast investors who

stand at our side even in turbulent times, putting us in the enviable position of being able to choose our investment partners. As the old saying goes, nothing breeds success like success.

It is Nanostart AG and you, its shareholders, who profit from all this: from the extraordinary potential held out by nanotechnology, from our global reach and global network, and from our truly exceptional staff. You reap the profits when we nurture our investments from seedlings to commercially proven products and processes, then sell them at commensurate valuations.

In closing, we can look back upon 2009 as a successful year, and upon a business which continues to gain speed, growth which is the logical consequence of the explosively growing nanotechnology market. And it is a growth which has continued impressively into the first few months of the new fiscal year.

My heartfelt thanks go out to the many people who contributed to the success of Nanostart over the past year. These include the staff of our offices in Germany and Singapore, who provide such energy and commitment to a single shared goal: to grow our company one step at a time, day by day. These include our business partners, with whom we cooperate at so many different levels. And of course, these include you, the shareholders of this company, who have entrusted us with your investment capital. Our driving ambition, above all else, is to reward your trust with solid investment returns.

Yours faithfully,

Marco Beckmann,
Chief executive officer, Nanostart AG
Frankfurt, Germany, May 2010

SUPERVISORY BOARD OF NANOSTART AG

Dr. Alfred Krammer Chairman

Dear Shareholders,

The supervisory board would like, through the following report, to inform you of its activities during fiscal year 2009.

Activities of the supervisory board during the fiscal year

During fiscal year 2009, the supervisory board discharged the ongoing tasks and responsibilities imposed on it by law and by the Company's articles of association (*Satzung*) with regard to the Company's business activities, financial condition and investment plans. As part of this, it regularly advised the executive board (consisting solely of the CEO) as to business policies and other fundamental issues, as well as exercised its supervisory role over the management of the Company, particularly as to whether its decisions and actions are consistent with the Company's business and profit objectives and in conformity with law and regulations. In accordance with Sec. 90 of the German Stock Corporation Act (*Aktiengesetz*), the supervisory board was regularly informed of significant business events during as well as outside of supervisory board meetings, both orally and in writing.

Changes to the membership of the supervisory board

The supervisory board consists, under the Company's articles of incorporation, of three members. These members are presently Dr. Alfred Krammer (chairman), Professor Wolfgang Heckl (deputy chairman) and Mr. Achim Lindner. During the reporting period, there was one change in the membership of the supervisory board. With effect from the conclusion of the annual shareholders' meeting of August 19, 2009, Professor Michael Fischer resigned his office as member of the supervisory board. In the course of this shareholders' meeting, Mr. Lindner was elected to succeed him as member of the supervisory board. His elected term of office will end with the conclusion of the annual shareholders' meeting at which approval is retroactively granted (*Entlastung*) for the actions of the supervisory board for the fiscal year ending December 31, 2013.

Significant events pertaining to meetings of the supervisory board

In the course of five meetings, at which all members of the supervisory board were present, the supervisory board extensively discussed the business situation of the Company, its subsidiaries and its portfolio companies; completed and intended sales of shareholdings; the Company's financial statements; its strategy; key personnel issues; and the risk control system put in place by the executive board (consisting of the chief executive officer). Furthermore, the chairman of the supervisory board was in regular contact with the executive board outside of these board meetings and obtained further detailed information on the Company's ongoing business situation, as well as on significant business events and developments. In addition, the supervisory board reviewed individual business issues of particular importance and decided on matters requiring its approval.

▸

During fiscal year 2009, the supervisory board specifically discussed, in addition to investments in new portfolio companies and sales of existing shareholdings, important developments within portfolio companies, in particular the largest of these shareholdings, MagForce Nanotechnologies AG and ItN Nanovation AG. It also discussed the staffing of key positions in the Company, development plans for the investment portfolio, and the Company's business activities in Singapore. Furthermore, the supervisory board exercised its supervisory role with regard to individual portfolio companies, receiving detailed reports on the portfolio holdings of Nanostart during supervisory board meetings. The supervisory board was similarly informed by the executive board outside of these meetings of extraordinary events involving individual portfolio companies.

Other matters specifically addressed by the supervisory board over the past fiscal year included the preparation of financial statements; investment planning; the appointment of the external auditor as well as assurance of its independence, as required by law; the determination of issues for special audit attention; and agreement as to fees. In the course of its reviews, it found no irregularities in the established practices of the Company.

In its meetings during the supervisory board, the supervisory discussed topics including the following, voting on resolutions as appropriate:

In the supervisory board meeting of March 16, 2009, topics of discussions included the financial situation of MagForce Nanotechnologies AG, the replacement of a portion of the shares held in MagForce, the EU regulatory approval process for the Nano-Cancer® therapy developed by MagForce, and cost reduction measures within the Company. In addition, a resolution was passed regarding the establishment of the venture fund in Singapore.

In the supervisory board meeting of June 23, 2009, the draft annual financial statements of the Company and management report were, with the assistance of the external auditor, explained in considerable detail and discussed. Further subjects of this meeting were the financing situation at MagForce Nanotechnologies AG as well as an explanatory overview of the Company's stock option program.

The subject of the supervisory board meeting of June 29, 2009, was the examination, in conjunction with the external auditor, and adoption of the annual financial statements of the Company and the management report.

Following the annual shareholders' meeting of August 19, 2009, the supervisory board was reconstituted to reflect its change in membership.

The primary topics of the supervisory board meeting of November 10, 2009, were a business review of the year to date, changes in the supervisory board of MagForce Nanotechnologies AG, the liquidity situation of the Company, and pre-

paratory measures for a capital increase. A further topic of discussion was the personnel situation within the Company.

Examination and adoption of financial statements

The financial statements of Nanostart AG presented for the fiscal year 2009 and the accompanying management report have been examined by the external auditor chosen at the annual shareholders' meeting, the Mannheim office of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, and endorsed with its unqualified audit opinion. In its report, the auditor described the risk management and monitoring system put in place by the executive board and declared it suitable to recognize, at an early stage, any development which might threaten the continued existence of the Company.

The supervisory board has examined the financial statements for the fiscal year ended December 31, 2009, the management report of Nanostart AG, and the proposal for the appropriation of profits, particularly with regard to their conformity with law and regulations and suitability for their intended purpose. As part of this examination, details were discussed with the executive board and, by telephone, with the auditor on the basis of the draft audit report. In the supervisory board meeting of May 6, 2010, the auditor reported on the results of its examination in its entirety as well as with regard to the issues mandated for special audit attention, providing detailed answers to the questions posed by supervisory board members. The members of the supervisory board reviewed and critically evaluated the audit reports and audit opinions, discussing these, as well as the examinations themselves, with the auditor as to the nature and scope of the examination as well as the results of the examination. The supervisory board was able to satisfy itself that there were no irregularities in either the examinations or the audit reports. The supervisory board conducted its own thorough examination of the financial statements.

Taking into consideration the auditor reports, the supervisory board then reviewed in detail the financial statements for the fiscal year ended December 31, 2009, the management report of Nanostart AG, and the proposal for the appropriation of profits and, based on the results of this examination, did not raise any objections. In its resolution of May 6, 2010, the supervisory board approved and adopted the financial statements as prepared by the executive board. The proposal for the appropriation of profits was likewise approved.

Dependent company report

The external auditor also examined the report prepared by the executive board pursuant to Sec. 312 of the German Stock Corporation Act (*Aktiengesetz*) regarding relations with affiliated companies (the "dependent company re-

▸

INDUSTRIAL REVOLUTION

Nanotechnology-based products and processes are the key to overcoming the great challenges of business and society.

port"). The auditor endorsed this report with the following audit opinion (translated from the original German):

"Having duly examined and evaluated the report, we confirm that:

1. *The factual information in the report is correct;*
2. *The company's disbursements relating to the legal transactions listed in the report were not inappropriately high; and*
3. *There were no circumstances related to the measures listed in the report which required an assessment deviating materially from that of the executive board."*

The supervisory board likewise examined the report of the executive board on relations with associated companies along with this audit report. The supervisory board satisfied itself, in particular, that the audit report as well as the examination conducted by the auditor conformed with legal requirements. The supervisory board particularly examined the dependent company report for its completeness and accuracy and, through this examination, assured itself that the list of affiliated companies was determined with due care and that necessary precautions had been taken to ensure that all legal transactions and measures subject to reporting requirements were recognized. This examination did not provide any indications which would suggest objections to the dependent company report. The supervisory board has no objections to the closing statement of the executive board contained in the report or to the results of the auditor's examination.

In conclusion, the supervisory board wishes to express its gratitude and appreciation to the executive board as well as the entire staff of Nanostart for their commitment and achievements over the past fiscal year.

On behalf of the supervisory board
Frankfurt, Germany, May 21, 2010

Dr. Alfred Krammer
Chairman of the supervisory board

Highlights of 2009

Building on the advances of prior years, Nanostart continued in 2009 to further strengthen and broaden its unique global position. Its blossoming business activities in Asia and the numerous successes from its portfolio companies provide convincing testimony to the company's relentless pursuit of growth. In this section, we provide a chronological summary of some of the highpoints over the past year.

JANUARY

Successful market entry in Singapore for Nanostart-held Curiox

Singapore Eye Research Institute (SERI) now using Drop-Array™ station from Curiox to perform analyses on microliter-sized samples of human tear fluid

Breakthrough technology enables diseases of the eye to be studied and diagnosed more precisely and efficiently than ever before

MARCH

Nanostart-held Nanosys begins cooperation with multi-billion-dollar biotech company

"Quantum dots" from Nanosys provide new solution in global war against counterfeit goods

Opportunities to use technology in a wide variety of applications

APRIL

Nanostart Asia receives investment capital from government

Investment agreements signed, with Nanostart AG and Singaporean government each investing SGD 10 million in Nanostart-managed venture fund

Nanostart-held Nanosys signs cooperation with Harvard University

Partners announce far-reaching cooperation agreements

Core business to be supplemented with out-licensing revenues

Revolutionary technologies for next-generation biosensors and non-volatile memories

MAY

Nanostart holding Nanosys launches new solar photovoltaic subsidiary, QD Soleil

Stand-alone division brings together unique nanotechnology-based know-how in solar energy

Solar industry expresses major interest in spin-off transaction

Nanostart-held Nanosys signs license agreement with international biotech company

QuantuMDx Group acquiring licenses for next-generation diagnostic technology

Revolutionary advance in diagnostics made possible by nanotechnology

Nanosys receives up-front payment plus ongoing license fees

Nanosys subsidiary QD Soleil acquires key solar energy patents

Solar energy business owned by Nanostart-held Nanosys expands market position

Path now clear for dramatic improvements in cost efficiency of solar generation

JUNE

Nanostart-held ItN Nanovation awarded major order for water treatment facility

Net revenues of well over a half million euros

Major significance for company's further commercial success

New technology from ItN Nanovation yields substantial cost and space savings

JULY

Nanostart-held Holmenkol reports further increase in growth rate

Over 30 percent revenue growth in first quarter of fiscal year 2009/2010

Sales in new Advanced Protection division up more than 70 percent

Prof. Alex Matter joins board of directors of Nanostart-held Curiox Biosystems

Leading international scientist and former head of global oncology research at Novartis

OCTOBER

Nanostart raises stake in successful Singaporean tech company Curiox Biosystems

Nanostart increases shareholding to 19 percent

Prominent new co-investors also brought in

NOVEMBER

Nanostart majority-owned MagForce announces successful completion of final clinical trials for Nano-Cancer® therapy

Study objective significantly exceeded, with median survival time doubled

Therapy shown to be highly effective, with minimal side effects

DECEMBER

Nanostart-owned MagForce Nanotechnologies AG submits application for EU regulatory approval of Nano-Cancer® therapy

Sales and marketing launch now in planning; "a real medical revolution"

MISSION STATEMENT

We endeavor to turn young nanotechnology-based companies into market leaders. We help them, as both investor and partner, to exploit the commercial potential of nanotechnology upon the basis of which they develop pioneering products and processes.

Growing with nanotechnology

The investment objective of Nanostart is to participate in the growth now being generated from the immense technological and business potential of nanotechnology. Within its portfolio, Nanostart currently has holdings in ten nanotech companies which hold out extraordinary promise. We identify our investment opportunities from among the world's best nanotechnology-based companies. Our vision is to create market leaders of tomorrow from our portfolio companies of today, successfully commercializing their products and processes which stand to transform existing markets from the ground up. Our investment focus lies in the most innovation-driven industries, such as environmental technology and cleantech; life sciences, medicine and healthcare; and electronics and information technology.

The groundbreaking innovations which are researched, developed and brought to market by our portfolio companies aim to help entire industries solve significant problems. The approach taken by Nanostart, therefore, is generally to realize gains by selling its holdings to industrial corporations at an optimal point in time. Toward this end, exchange listings and IPOs may play a helpful role in advancing the development of its portfolio companies by opening up new sources of growth capital. Nanostart primarily invests in young, up-and-coming companies in phases when their growth is most rapid and the potential growth in value is greatest. In order to make the most effective use of its own experience and expertise in commercialization and venture management, Nanostart strongly prefers to play the role of Lead Investor in its companies, enabling it to make the most active contribution to the business and strategic decisions taken by the company. This role generally involves a seat in the company's board of directors or supervisory board. The individual investments undertaken by Nanostart generally fall in the range of EUR 1 to 10 million.

Understanding our portfolio companies inside and out

Before an investment candidate is brought into the Nanostart portfolio, it is subjected to an exhaustive due diligence examination. The essential prerequisites for any investment by Nanostart are a pioneering technology, sufficiently large target markets, and adequate intellectual property protection for the technology. The personal character and professional track record of the management team play a critical role in the final decision.

Since its founding in 2003, Nanostart has already been able to successfully bring five of its portfolio companies to the stock exchange. In addition, it has sold a sixth holding to a major life sciences company in a trade sale and the primary product family of a seventh company to a global pharmaceuticals corporation in an asset deal.

Leveraging our global network

Nanostart views its portfolio companies as business partners which receive whatever support they need to grow

▶

successfully. In providing this support, Nanostart actively draws on its extensive experience in nanotechnology, in the capital markets, in entrepreneurial management, and in the successful commercialization of new products and processes.

Every company to join the Nanostart family becomes a part of its global network of contacts throughout industry, academia and R&D, with government authorities, and with investors and capital market experts. Particularly in the early phases of company development, the right contacts to commercialization partners can be a key determinant of later success.

An important tool for maintaining and building this network is the visibility which Nanostart achieves with its program of events, from nanotech trade fairs to equity conferences. In 2009 alone, Nanostart delivered presentations and speeches at more than 20 such events around the world.

Experts: Working with the best

Marco Beckmann, the CEO of Nanostart, is widely regarded as one of the world's leading experts in the area of nanotech investing. Since founding Nanostart in 2003, his longstanding passion for nanotechnology and his expertise in venture capital have evolved with the rapidly developing market. As far back as 2001, Beckmann authored and published the world's first book on nanotechnology and the capital markets. As chief executive and investment head at Nanostart, Beckmann has directed the development of its global investment portfolio as well as the execution of a number of exchange listings and exit transactions.

These portfolio holdings are managed by experienced investment teams which Beckmann has put together in Germany and, more recently, in Singapore. These teams consist of professionals who bring successful track records, particularly in Germany, where the team includes prominent experts who bring many years of proven experience in major investment and private equity companies such as 3i. The young team in Singapore includes local staff with superb academic and professional backgrounds along with valuable contacts in the country's excellent universities. In addition, where Nanostart requires highly specialized expertise, such as in conducting intensive due diligence of potential investment candidates, it calls on its network of external experts on an as-needed basis.

The company's supervisory board is chaired by Dr. Alfred Krammer, a prominent German attorney specializing in commercial, company and capital markets law. Professor Wolfgang M. Heckl, its deputy chairman, is one of the world's leading scientists in the field of nanotechnology; he is professor of experimental physics at the Ludwig Maximilian University (LMU) in Munich, Germany, and has been director since 2004 of the Deutsches Museum, one of the world's most renowned scientific museums. The third member of the supervisory board is Achim Lindner, CFO of Börsenmedien AG, a leading

German publishing and media house for finance and investment.

Investing in the future

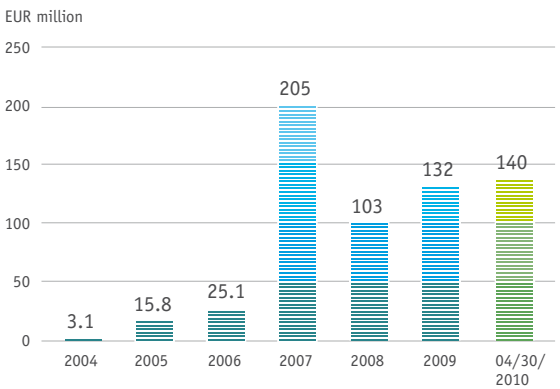
Nanostart offers its shareholders the opportunity to participate in the rapid development of the nanotechnology economy and to invest in a future with transformational potential across countless industries. Because nanotechnology remains in its early stages, the full range of its possible application is still unfolding, and thus the growth opportunity presented by Nanostart is, for the foreseeable future, without limit.

Growth in net asset value

At the close of fiscal year 2009, Nanostart had built its net asset value (NAV), i.e. the recorded value of its investment holdings, to more than EUR 130 million, an increase of roughly EUR 30 million over the prior year closing value. NAV further increased during the first few months of this year, amounting to approx. EUR 140 million as of April 30, 2010.

In computing NAV, the shareholdings of Nanostart in exchange-listed companies, presently MagForce Nanotechnologies AG and ItN Nanovation AG, are valued at their current market values. The remaining shareholdings in privately held, unlisted companies are valued at their acquisition cost. For this reason, these two exchange-listed companies have a particularly great effect on changes in NAV. Because NAV does not consider potential increases in the value of other, unlisted portfolio holdings carried at cost, it may significantly understate the values of these holdings. In some cases, other investors have taken shareholdings in these companies at a later point in time and at higher valuations, suggesting that the current values of these Nanostart holdings may already exceed their recorded values.

Growth in net asset value (NAV)



NANOSTART GOES EAST

Singapore has become a prime example of Nanostart investment activities in Asia.

Nanostart in Asia: Our subsidiary Nanostart Asia Pte Ltd

In this age of globalization and global industries, one's market environment must necessarily be the entire world. Nanostart constantly monitors developments in nanotechnology around the planet, actively investing in technology centers from Silicon Valley to Singapore. It is evident that the governments of more and more countries are recognizing the great importance of nanotechnology for their national economies – and actively supporting it. At present, Singapore stands out as a shining example of how to foster favorable conditions for nanotechnology. It is here that Nanostart decided in 2008 to establish its 100%-owned subsidiary, Nanostart Asia Pte Ltd.

Singapore is one of the most cost-effective places to do business worldwide, and its primary official language is English. With its low taxes and high degree of legal clarity, Singapore is regarded by many as the "Switzerland of Asia." The forward-thinking government of this unique city-state has made it a strategic aim to build Singapore into a regional hub for nanotechnology. In the country's state-supported universities and research institutions, nanotechnology advances are continually being developed into commercially viable products and applications. The expertise and practical know-how from Nanostart will now help the best of these to commercialize faster and better. Nanostart is proud to be the investment partner of the government in a small but extraordinary country which has created such promising conditions for new nanotechnology ventures

As one of the region's major airport hubs, fast-growing Singapore provides excellent access to the enormous Asian market of some 3.3 billion people, with flying times of just a few hours to most key cities. Nanostart has now prominently established itself as the leading nanotechnology investor in Singapore, and it will further expand this position in the future with the longer-term aim of expanding from Singapore into neighboring Asian markets.

Two highly promising portfolio companies

Not long after Nanostart established its subsidiary Nanostart Asia Pte Ltd in April 2008, it made its first investment in Singapore in Curiox Biosystems Pte Ltd, a spin-off of the country's world-renowned Institute of Bioengineering and Nanotechnology. Curiox, a nanotechnology-based company in the area of biochemical analytics, has developed a novel process which enables the analysis of aqueous biosamples to be performed significantly faster and better. Just a few months after Nanostart enabled the company's spin-off with its initial nvestment, the first sales revenues were already being generated. The next step for Curiox is to expand its sales coverage across the world's major markets. Following this first success, Nanostart invested in its second Singapore-based portfolio company in December 2009. The company, BioMers Pte Ltd, produces ultra-strong polymer composites reinforced with nanofibers. It is the world's only company to offer orthodontic braces made with clear or colored translucent plastic wires. With this breakthrough technology which stands to fundamentally transform the global market for orthodontic devices, BioMers is uniquely able to address

▸

the rapidly growing demand for aesthetic orthodontics. Its proprietary technology, which has already received regulatory approval in the EU, the U.S. and Japan, provides the company with a significant competitive advantage. Here as with Curiox, the investment capital from Nanostart will enable the company to push forward with its global expansion.

Nanostart Singapore Early Stage Venture Fund I Pte Ltd

Both of these exceptionally promising investments have been made by way of the Nanostart Singapore Early Stage Venture Fund I, which falls under the auspices of Singapore's Early Stage Venture Funding Program. This program, an initiative of the country's famed National Research Foundation (NRF), an agency of the Office of the Prime Minister of Singapore, has the charter to provide enabling support to high-tech companies in early stages of development. The Nanostart fund, which invests exclusively in nanotechnology-based companies, is the only fund of its kind in Singapore.

The Singaporean government and Nanostart have each committed a share of SGD 10 million (approx. USD 5 million) to the new fund. Both will profit from the growth in the fund's value. Nanostart, as fund manager, will also receive a management fee along with a success-based profit participation. In addition, Nanostart holds the option to buy out the share held by the Singaporean government within the first five years after the initial closing by paying a rate of return on this share of five percent per annum. As an important investment partner to the government, Nanostart has unrivalled access to the country's most promising nanotech ventures.

Top-notch local team

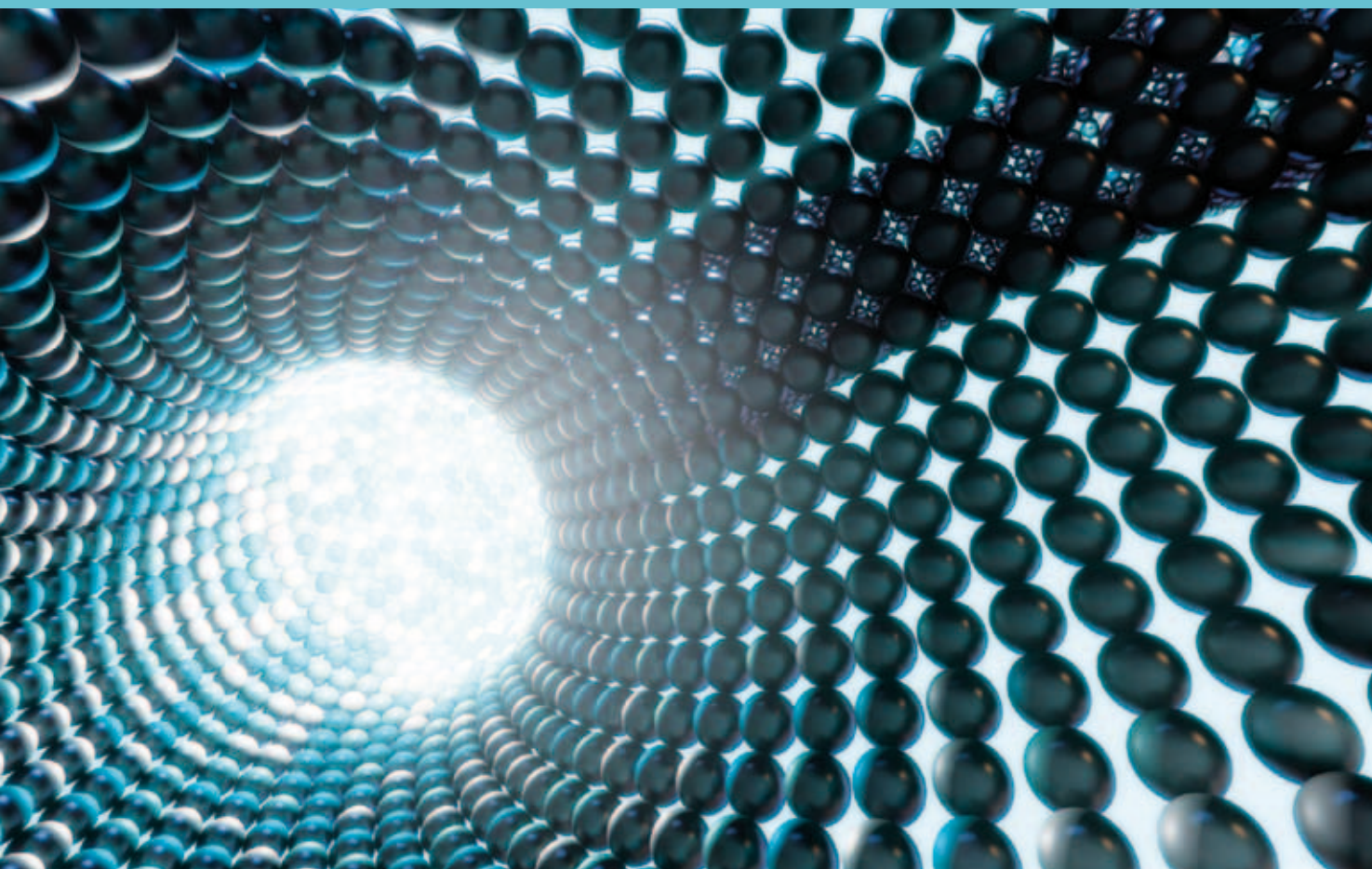
Nanostart Asia Pte Ltd is headed by Andreas Kröll, who serves as the subsidiary's managing director. He is responsible for investment activities in Singapore, for managing the investment portfolio, and for coordinating exits. With his long years of service managing the U.S. portfolio holdings of Nanostart, as well as his prior professional experience as corporate finance manager at Deutsche Bank, Mr. Kröll brings the needed background to lead the Nanostart Singapore Early Stage Venture Fund forward. He is supported by a team of three local staff.

Nanostart appointed to key decision-making committee

As a final testament to the unique position which Nanostart holds in Singapore, Marco Beckmann was in July 2008 appointed to the Final Evaluation Panel of Singapore's Technology Enterprise Commercialisation Scheme (TECS). This key decision-making committee is comprised of high-ranking government representatives as well as experts from research, academia and business. It decides upon which start-up ventures are most promising and should thus receive government funding.

NANOTECHNOLOGY IN FOCUS

There is hardly any other company which is growing with the success of its portfolio companies, and thus with nanotechnology, like Nanostart AG.



Nanotechnology: Turning vision into reality

The ability to read thoughts, to travel through time, or to make things invisible – these are all the stuff of science fiction novels. Or are they? At least in terms of making things invisible, a remarkable breakthrough was reported in the first quarter of 2010: A German physicist was able to make a three-dimensional object invisible, making it disappear under a kind of reflective carpet. Perhaps this is the first step toward the ultimate camouflage wear. This revolutionary advance was made possible by materials developed on the basis of nanotechnology.

This ability to make things invisible is a case in point of the enormous potential held out by nanotechnology. Things which until now have been regarded as fantasy are, in fact, becoming reality.

New properties through miniaturization

Nanotechnology is the science which involves taking advantage of the special properties of the very smallest physical structures. A nanometer is just one millionth of a millimeter. The relationship in size between a "nanoparticle" and a soccer ball is about the same as between the soccer ball and planet Earth. "Nanomaterials" generally refers to structures of up to one hundred nanometers in thickness or diameter. When tiny particles are made of this size, the ratio of surface area to volume is tremendously large.

A simple example should illustrate the nature of nanotechnology: Imagine a grain of sand made of quartz. In order to make the math easier, let us further imagine that it is perfect cube. If each edge has a length of one millimeter, then it has a total surface area of six square millimeters. If one takes this same single grain of sand and cuts it into many tiny cubes of one nanometer on each edge, one now has not one grain of sand but one quintillion (1018) tiny sand particles, with a total surface area of six square meters. In other words, by making the cubes extremely small, we increased the total surface area from the same volume of sand by a factor of one million: from six square millimeters to six square meters. In effect, miniaturization proportionately increases the influence of surfaces – and through this simple illustration of a grain of sand, you can get an idea of what nanotechnology is all about.

To consider a more concrete example, one could easily protect the entire surface of a car door against scratches with just a tiny amount of quartz by applying the material in this nanodimension. The coating would be so thin that it would not even be visible to the naked eye.

Further, surfaces display chemical and physical properties which are very different from the interiors of physical structures. Materials generally become much more reactive when they are in nano-dimensioned structures. A beautiful example of how nanodimensioning can completely change optical characteristics comes from the Middle Ages, when artisans – perhaps the world's first unwitting nanoscientists – used nanoparticles of gold to make their stained glass windows red.

▶

Taking nanotechnology at another level, through the targeted manipulation of structures at the molecular level, it enables the creation of materials with entirely new properties. The element carbon provides a familiar example of how different materials can be by virtue of their molecular structure. The graphite in a pencil is a form of carbon, as is the soot from a candle. But diamond too, the hardest material found in nature, is a form of carbon. Another way that this ubiquitous element can be structured is in the form of carbon nanotubes (CNT), which are nano-sized, honeycomb-like structures which can occur in nature but can also be produced artificially. These structures are stronger than steel, lighter than aluminum, and display extremely high electrical conductivity.

It is the ability of nanotechnology to transform mechanical, optical, electronic or chemical properties through this miniaturization effect, and through dramatically expanding the surface area ratio, which makes it such an extraordinarily powerful tool.

New solutions thanks to nanotechnology

The population of this planet is growing along with life expectancy. Consumer demands are also rising around the globe. At the same time, the limits of natural resources like clean water and fossil fuels are becoming ever more problematic. It is also becoming increasingly apparent that our natural environment cannot endlessly absorb the emissions and pollutants which we discharge into it.

In order to overcome the enormous challenges which face mankind, new solutions are needed. Nanotechnology holds out the key which may unlock many of them. Already today, nanotechnology is enabling extremely strong but lightweight materials which, for example in engines, reduce weight and save energy. Solar panels, fuel cells, batteries, and even microchips are made more efficient with the help of nanotechnology. LED lighting based on nanotechnology stands to send traditional light bulbs the way of the buggy whip. And in medicine, nanotechnology is being used for new approaches to drug delivery and dosage control, for new imaging procedures and for new ways to fight diseases. MagForce Nanotechnologies, majority owned by Nanostart, has developed a revolutionary way to use nanoparticles to destroy tumors from the inside out, called Nano-Cancer® therapy, with minimal side effects or patient discomfort. Nanotechnology is already a part of our everyday lives in the form of waterproof textiles, scratch-resistant coatings, and paints from which water effortlessly beads off. These are just a few of countless examples; there is hardly an industry which is not affected in some way by the remarkable innovative power of nanotechnology.

Nanotechnology is increasingly being seen as a key technology which both opens new markets and cuts across existing ones. Investment banking giant Merrill Lynch has characterized nanotechnology as the new Industrial Revolution, comparing its effects on social and economic development with those of the railroad, the automobile and the computer. This is also of enormous practical importance to

businesses – and the reason why more and more governments are providing massive financial support to develop nanotechnology-based industries. In our home country of Germany, the federal government has launched a program called "Nano-Initiative - Action Plan 2010" that aims to accelerate the implementation of research advances into commercial products. The program, which the German government calls an "important part of its high-tech strategy", should also encourage more companies to become engaged with nanotechnology. The seven involved government ministries have each named a "nanotechnology representative" to keep the initiative on track. For the year 2009 alone, total funding for nanotechnology from the German federal government, state governments, and agencies was roughly EUR 430 million. This puts Germany far in the lead among its European counterparts.

At the broader European level, the European Union currently spends some EUR 740 million each year in public funding for nanotechnology, putting it roughly on par with the U.S. and Japan. Around the world, government funding for nanotechnology R&D, now estimated at more than USD 4 billion annually, continues to rise. In Russia, a government agency called "Rusnano" was founded in 2007 and funded with the equivalent of USD 5 billion. Its goal is to make Russia one of the world's leading nanotechnology economies by 2015 – a remarkable commitment from a country which until now has largely based its economy on its vast energy and mineral resources.

As large as these sums are, however, the public funding being provided by governments is dwarfed by the private capital flowing into nanotechnology, with private companies alone investing more than USD 6.5 billion in this technology of the future. These large amounts of capital testify to the confidence which so many business leaders have in the economic potential of nanotechnology.

Already today, the total value of products on the market which in some way have been made better with the help of nanotechnology is more than USD 150 billion. And the market continues to boom: Lux Research, a prominent U.S. consulting and research firm, forecasts the market for nanotechnology-based products and applications at USD 2.5 trillion by the year 2015. In other words, by the year 2015 some five percent of global GDP will involve nanotechnology. The experts at Lux Research forecast, in addition, an average annual growth rate of 45 percent.

This all means that the changes in markets and industries being brought about by nanotechnology will continue to accelerate. It means economic development for countries, reduced pressure on the environment, and a higher quality of life. The portfolio companies in which Nanostart is invested are in high-growth industries which are driven by innovation, and they are a reflection of the enormous potential of nanotechnology itself. Nanostart is growing, like few other companies, with nanotechnology and with the success of its portfolio companies which nanotechnology makes possible.

With venture capital to commercial success

For new ventures and young, growing companies, a reliable source of funding is a critically important success factor. Until companies are able to generate their own sales and profits, it is their lifeblood. So how do entrepreneurs go about getting the capital which they need to pay for offices, equipment and staff? Particularly for technology-based startups, which often need expensive R&D facilities, getting the needed financing in place can be a major challenge.

Family, friends and government funding

For those who are fortunate enough to have family members or friends with capital to invest, this can be invaluable. Government programs, where they are available, can also be an extremely attractive source of new venture funding. Within Germany, for example, a variety of subsidized programs are available from the EU, from the federal government and from states, generally as either a zero-interest loan or as an outright grant. Between 2006 and 2009, the German federal government alone provided EUR 640 million in funding for nanotechnology under its high-tech strategy initiative. Funding like this, however, is often limited to new start-up ventures or very early-stage companies.

Bank loans

Once these sources have been exhausted, the typical next step is to approach a bank for a loan. But because the financing needs for these new ventures is generally high, and the entrepreneurs generally have little to offer in the way of security, these young companies usually do not meet the credit requirements of these lenders. In addition, when a loan is taken out, it must be repaid together with interest, which puts an additional burden on the company's future cash flows. Finally, the company founders are often required to give guarantees, holding them personally liable if the venture fails.

The unique role of venture capital

Nanostart AG, as a venture capital investor, provides financing to young companies with strong growth prospects. The principle of venture capital is simple: The investor buys a share of the company, and the amount which is paid for this shareholding flows into the company as new equity. Venture capital investors like Nanostart, however, go beyond just this financial investment, sharing their business know-how and commercialization experience, and helping the companies on their way to market launch and

profitability. This helps the investor's portfolio companies to develop more robustly so that the individual company – as well as the shareholding of the investor – increases in value. And the company has a further benefit: If it should fail, the founders do not have any personal liability toward the other investors.

Risks inherent in venture capital investing

Compared to a bank, which generally lends against some kind of security and is rarely willing to take on much risk, the risks which a venture capital investor assumes are much greater. In essence, venture capital investors must create their own "security", and the way they do this is by understanding and mitigating these risks to the maximum extent possible before undertaking any investment. An essential part of this is the "due diligence" examination, in which the investor intensively examines every relevant aspect of the venture, starting with its technology and patents, its target market, and – often most decisive of all – the personal character and professional track record of the management team. In the course of negotiations, the investor comes to an agreement with the management team first on the valuation of the company, then on the amount of the investment and the share of ownership which will be granted in exchange for it.

Venture capital as an engine of growth

The aim of any venture capital investor is to sell the shareholding in the company at a significantly higher price than it originally cost, which generally occurs as soon as the company turns profitable. The difference between the purchase price and the sale price is the investor's reward for taking on the risk over the entire period for which the investment is held. To keep this risk to an acceptable level, good venture capital investors will only invest in companies which they are quite certain will succeed. The market knows this, and thus the decision of a renowned venture capital firm to invest in a portfolio company is widely recognized as a seal of quality.

Venture capital fills a vital economic role. It provides the financial means for young, highly promising companies to grow, creating not only new products and processes which contribute to national economies but also high-quality jobs. The concept of venture capital was originally pioneered in the United States, which remains today the largest single market. Within the U.S., major corporations such as Apple, Intel and Google were originally financed and launched on their way to success with the help of venture capital.

A TALK WITH OUR SENIOR INVESTMENT MANAGERS

Dr. Hans Joachim Dürr left, Hansjörg Ruof center, Dr. Stefan Elsser right

"We look for doers who can think critically"

Dr. Stefan Elsser and Hansjörg Ruof, senior venture partners of Nanostart AG, together manage the company's investment activities in Europe. Between the two of them, they bring decades of proven investment experience, a large part of which was gained at 3i, a renowned name in international private equity. Dr. Elsser and Mr. Ruof each bring distinguished track records, including numerous transactions totaling hundreds of millions of euros in value. In this interview with Dr. Hans Joachim Dürr, public relations manager at Nanostart, they talk about the challenges of venture capital investing and explain how Nanostart has managed to achieve such remarkable success.

You make decisions involving millions of euros and companies with groundbreaking new technologies. How does this translate into your day-to-day work at Nanostart?

Elsser: Our task is, first and foremost, to manage and foster our existing portfolio holdings. What we do is traditional venture capital, which means working closely with our portfolio companies to ensure that they develop successfully, with the best possible deployment of human and financial resources, and in the shortest possible timeframe. In a typical case, after years of close work together with a portfolio company – and a commensurate rise in valuation – we will decide, in close consultation with our CEO Marco Beckmann, on the optimal exit strategy. Our fundamental objective is to maximize the investment return to Nanostart and its shareholders. The exit is usually in the form of a "trade sale", whereby we sell our shareholding to a strategic buyer such as a major global corporation.

When is the right point in time to exit an investment, i.e. to sell the shareholding which Nanostart has in a portfolio company?

Ruof: The optimal timing for any exit is ultimately determined by the market. One must always be at the ready to enter into talks with partners. But planning an exit strategy from behind an office door is really counting one's chickens before they've hatched; the buyers have got to be out there.

Before an exit, however, there is of course all the work which you do to build the portfolio and help the individual portfolio companies. Is there a typical process for how Nanostart goes about investing in a company?

Ruof: I think every investment we make is different, so there really isn't a "typical" investment. At the beginning, of course, there is always a rigorous due diligence examination in which we dig into all aspects which may determine the business development and ultimate success of the company. These include issues like the technology, target markets, intellectual property, competitors, the management team, and much more. In our due diligence examinations, we draw extensively on specialized expertise

▸

in relevant industries and technical areas from throughout our global network. This ensures that our due diligence results are very robust.

Are there any indicators that an investment promises a good return, even before you do this exhaustive due diligence?

Ruof: Unfortunately, there's no standard recipe. Perhaps the most important determinant is the people, who ideally are a tight team in which each complements the other. We look for doers who can think critically, who can reflect on good ideas from outside and put them into action. We want solid managers who, in addition to thinking in terms of marketable products and customer benefits, will keep their heads even when under great stress.

Does Nanostart only invest in companies in a particular phase? In what phases of development are the companies in which Nanostart invests?

Elsser: Nanostart invests in nanotechnology-based companies which, in the ideal case, have already developed a product or process and are ready to bring it to market. These may range from start-ups to mid-stage companies. In can, however, be that we invest earlier than this – as in the case of Namos – or even at a later stage – as with Holmenkol, which already had an established market presence when we made our initial investment.

Once you've done all of your due diligence and have decided to proceed with an investment, how do you decide on the amount of capital to invest? Does Nanostart have a specific limit? What happens when a company needs additional capital later?

Ruof: The amount invested by Nanostart is generally up to EUR 10 million. In making this decision, we consider our own strategic preference of being the largest investor, the so-called "lead investor." This gives us a strong voice in the company and allows us to make the greatest contribution. We also make the disbursement of capital contingent upon the company achieving certain milestones. If a company is performing well but needs additional capital, we are of course prepared to look at additional rounds of financing, which ideally would involve additional equity capital from us in return for a larger shareholding. It could, however, also mean bringing in new investors who would take a share in the company, but even in this case, we would retain the role of Lead Investor.

As Lead Investor, Nanostart takes a great deal of responsibility on its shoulders. When you take on this role, what are the greatest challenges which you face in working with a portfolio company?

Elsser: In all ventures involving technology, a frequent mistake is that the founders are overly enamored with the technology itself. But to make it commercially successful,

the technology must be developed into a commercially viable product; it is a means to an end, namely to fulfill customer needs. In short: The primary challenge facing any technology company is successful commercialization.

Does Nanostart as an investor have a say in putting together the management team? Or to put it more broadly: Is this something which an investor should do?

Elsser: Through the regular reports that we receive as well as the board seats which we generally hold, it goes without saying that we are extremely well informed about the performance and current situations of our portfolio companies at any point in time. Where there are issues, we step in early and proactively so that we can try to avert any potential crisis situation. We do, however, take time to analyze situations carefully before we decide on the best course of action, which could really involve anything. A prime example of this is the turnaround which was achieved at ItN Nanovation.

What is the greatest single challenge which you, in recent times, have faced in your work for Nanostart?

Elsser: I think we were all immensely gratified by our remarkable success at getting ItN back on its feet.

Investments which offer great rewards are often associated with significant risks. How do you mitigate these risks?

Ruof: Our approach at Nanostart is most definitely not to put all of our cards on a single goose which may or may not lay a golden egg. We make great efforts to invest not only in companies with blockbuster potential but also in those which offer a decent fallback scenario, even if the upside case doesn't quite work out. In managing a venture capital portfolio, there are times when one has to shift gears from aggressive pursuit of future growth to protecting capital by focusing more on current performance.

One final question: Nanostart is the world's most successful nanotechnology investment company. What is the secret of its remarkable success?

Ruof: It results from the convergence of several factors, each of which contributes its part to our overall success. First of all, there is the concentration of our portfolio companies in the fastest growing industries. Of course, one also has to view this interactively in the context of the enormous influence which nanotechnology is predicted to have on future economic growth. Secondly, there is the global approach which we take, searching out the best investment opportunities wherever they can be found. This is essential because nanotechnology itself is global. And thirdly, before we make any investment, we really scrutinize the company inside and out. It is the combination of these which holds out the potential for maximum returns while simultaneously minimizing risk.

Our track record of successful exits

For any venture capital investor, the number of "exit" transactions – sales of portfolio shareholdings to other companies or through the public markets – is an essential measure of success.

Since its founding in 2003, Nanostart has already been able to successfully execute seven exit or partial exit transactions, as well as to list several of its portfolio companies on the world's stock markets. This remarkable track record stands head and shoulders above all other nanotechnology investment companies.

Exchange listing

Nasdaq
USA
January 2004, sold 2005

Arrowhead Research CORPORATION

Trade sale of company

to Heamonetics Corp.
USA
June 2006

ARRYX

Asset sale of product family

to Roche
Switzerland
March 2010

BioMicro® SYSTEMS

Exchange listing

Frankfurt Stock Exchange
Germany
November 2005, sold 2007

nanofocus see more

Equity placement

Nordic Growth Market
Stockholm, Sweden
January 2007

obducat

Equity placement

OTC BB
USA
December 2005

Integral Vision Production Display Inspection

Exchange listing

Frankfurt Stock Exchange
Germany
September 2007, partial sale 2007-2010

magforce® NANOTECHNOLOGIES AG

BioMers

BioMicro SYSTEMS

CURIOX

HOLMENKOL

ItN Nanovation

lumiphore

magforce NANOTECHNOLOGIES AG

namos

NanoGram corporation

nanosys

The Nanostart investment portfolio: Our successes of tomorrow are our portfolio holdings of today

The companies in the Nanostart investment portfolio are working hard to develop pioneering nanotechnology-based products and processes to market maturity, to successfully launch them, and to firmly establish them.

Nanostart AG is the world's only nanotechnology venture capital company with investments in all of the leading nanotech regions: Europe, the U.S. and Asia. The Nanostart investment portfolio currently consists of shareholdings in ten nanotechnology companies which we take pride in presenting to you on the following pages.

BIOMERS PTE LTD SINGAPORE

BioMers produces extremely strong plastic composites using nanofibers. Its proprietary materials bring entirely new properties to innovative applications, such as translucent wires for new-generation aesthetic braces.

BioMers

Taking the metal out of braces with high-performance nanopolymers

"Brace face", "metal mouth", "train tracks" – most of us remember all too well these slang names for dental braces and retainers which are anything but flattering. But to fix crooked teeth, there is simply no alternative. It should thus come as no surprise that the call for new approaches to orthodontic devices which are aesthetically more acceptable is becoming ever louder: For a beautiful smile instead of a mouth full of metal. And it's not just teenagers who wear braces; more and more adults are seeking professional orthodontic treatment. BioMers, a Nanostart-held medical technology company based in Singapore, is now the world's first company to fulfill this great market need by offering completely translucent braces.

Orthodontic braces consist of brackets and arch wires. The brackets, which are glued to the teeth and are about the size of two match heads, were originally made of metal but more recently have also been available in ceramic or specialized plastics. Arch wires are then threaded through these braces, connecting them with one another. The arch wire is then put under tension, transferring force to the teeth though the brackets and gently pushing or pulling them into the desired position.

While non-metallic alternatives are already available for brackets, the combination of strength and flexibility required for arch wires has meant that metal has been the only suitable material for constructing them – until now.

▶

Using its new nanotechnology-based process, BioMers is now able to produce super-strong translucent wires less than a millimeter in diameter. With their composite structure of polymer fibers mixed with a special nano-filler, the plastic wires have the mechanical properties of their metal counterparts: extremely high tensile strength together with the needed flexibility.

Thanks to nanotechnology, the company is now the world's sole producer of translucent arch wires for orthodontic braces. Regulatory approval is already held in the U.S., the EU and Japan, where the new-generation arch wires are already on the market through established distribution partners. BioMers holds out the potential to fundamentally transform the global market for orthodontics.

The new capital from Nanostart will primarily serve to strengthen the company's international marketing and sales resources and to further expand its already existing distribution network of some 40 partners around the world.

BioMers is a spin-off of the world-renowned National University of Singapore (NUS), where the company's unique technology was originally developed. In addition to its headquarters in Singapore, the company also has an office in the United States.

Rapidly growing global market for orthodontics

The global market for orthodontic devices – arch wires and brackets for braces, and retainers used following therapy with braces – currently totals some USD 2.4 billion. Over the past nine years, this market has grown by approx. 7.5 percent annual in the U.S. alone; in other regions, particularly in Asia, the market has been growing at double-digit rates.

Products already launched on global market

In addition to its translucent arch wires for braces, BioMers also produces translucent retainer wires. These new-generation retainers, called ASTICS™ retainers, have the potential to entirely replace the familiar metal wire-based Hawley retainers, which currently make up some 65 percent of the U.S. market. More recently, BioMers has begun producing fashion-colored wires and retainers to appeal to the youth market.

In December 2008, BioMers added translucent brackets to its product offerings and is thus now able to offer a complete range of aesthetic solutions to orthodontic professionals: aesthetic braces, consisting of translucent arch wires and translucent brackets, as well as translucent wire-based retainers.

Pioneering leadership

The company's three-person senior management team brings extensive experience in the establishment and early-phase management of business ventures. Dr. Mervyn Fathianathan, CEO of BioMers, is one of its three original founders.

Dr. Fathianathan previously served as assistant professor at the George W. Woodruff School of Mechanical Engineering at Georgia Institute of Technology. He brings an exceptionally broad academic background, with his studies in the U.S., the UK and Singapore extending beyond his extensive knowledge of technology. Following his Ph.D. in mechanical engineering, he went on to a joint postdoctoral program in technology commercialization at Cambridge University, London Business School and Imperial College, which he has more recently been able to apply with such success at BioMers.

BASIC FACTS

Industry
Medical technology

Technology
Patented technology for producing ultra-strong plastic composite wires

Applications/target industries
Orthodontics, medical technology

Number of staff 11

Patents 2 patent families across 14 countries

Company phase Pre-IPO

Founded 2005

Primary office Singapore

INVESTMENT POTENTIAL

Regulatory approval for translucent orthodontics already received in the U.S., Europe and Asia; product already on the market

Strong distribution network in target markets

High sales potential in the growing market for aesthetic braces

Further innovative solutions for dental market already in product pipeline

MANAGEMENT

Dr. Mervyn Fathianathan, Managing Director, CEOGeorge
George Aliphtiras, Vice President of Business Development
Renuga Gopal, Vice President of Manufacturing

TRANSACTION DETAILS

Initial investment 2009

Situation Growth financing

Ownership stake 16 percent
BioMers is being financed through the Nanostart Singapore Early Stage Venture Fund.

CONTACT

BioMers Pte Ltd
18 Boon Lay Way 05-99
18@TradeHub 2
Singapore 609966
T +65 67795909
F +65 67795909
contact@biomersbraces.com
www.biomersbraces.com

BIOMICRO SYSTEMS SALT LAKE CITY, UTAH

he technology from BioMicro is transforming DNA analysis: At the start of 2010, the company's flagship product family was sold to global pharmaceutical powerhouse Roche.

TECHNOLOGY TRANSFORMING A GLOBAL MARKET

With its unique biochips, BioMicro makes it possible to perform tens of thousands of individual biological tests on a surface the size of a fingernail. The glass or plastic substrates arrayed with thousands of tiny wells help researchers, for example, to compare DNA fragments with each other in just a few minutes, with minimal manual involvement. With its MAUI portable microarray hybridization systems, BioMicro offers a complete solution which has already been sold to thousands of labs around the world. MAUI is significantly faster and more reliable than traditional bioanalysis methods and requires significantly smaller sample amounts. In March 2010, the Swiss pharmaceutical giant Roche, which is also a world leader in diagnostics, acquired the MAUI product family in an asset sale transaction – a powerful testimony to the breakthrough innovation which MAUI represents. And the innovative potential of this Nanostart portfolio company is far from exhausted.

Roche subsidiary NimbleGen, which for years has been successfully selling BioMicro equipment as an OEM partner in conjunction with its own microarray sets, is very pleased about its acquisition of the MAUI line, which according Dr. Andreas Görtz, VP of Marketing at Roche NimbleGen, is "integral to the high quality data the NimbleGen array workflow provides researchers worldwide."

The successful sale of the MAUI product line now provides a solid basis for BioMicro to develop other new products. With research and diagnostic labs now convinced by the technical superiority of solutions developed by BioMicro, the company is superbly positioned to move into other product areas, such as with its IGOR product. IGOR is a highly efficient analysis instruments first introduced in the fall of 2009 which enables physicians to conduct sophisticated diagnostic tests right in their own offices. This innovation stands to make the sending of patient samples to outside laboratories a thing of the past, with major savings in both cost and time. According to the company, these fully automated analysis systems offer the advantages of exceptional ease of use along with very high test sensitivity and should significantly increase the clinical availability of DNA-based diagnostic testing.

The unmatched efficiency of the new solution from BioMicro, in a field experiencing rapid growth across many different applications, holds out significant long-term revenue potential.

BASIC FACTS

Industries
Life sciences, biosciences, diagnostics

Technology
Compact DNA analysis systems based on complementary hybridization which enable many thousands of individual samples in tiny amounts to be automatically analyzed in parallel, on a scale which until now has only been possible in large research laboratories

Applications/target industries
Medical care, pharmaceuticals, biochemistry, genetics and microbiology

Number of staff 23

Patents 6 (several others in process of registration)

Company phase Pre-IPO

Founded 2000

Primary office Salt Lake City, Utah, USA

INVESTMENT POTENTIAL

Pioneer and leading provider in the highly profitable segment of nano-analysis tools which has already reached break-even

BioMicro is a major beneficiary of the migration of DNA testing from centralized laboratories into clinics and doctors' offices

MANAGEMENT

Rob Parry, CEO
Nils Adey, Chief Scientist
Jessica Barrett, Sales & Marketing

TRANSACTION DETAILS

Initial investment 2004

Situation Growth financing

Ownership stake 8.4 percent

CONTACT

BioMicro Systems, Inc.
1290 West 2320 South
Suite D
Salt Lake City, UT 84119-1476
USA
T +1 801-303-1470
F +1 801-303-1471
info@biomicro.com

CURIOX BIOSYSTEMS PTE LTD SINGAPORE

The technology from Curiox is driving revolutionary advances not only in medical analytics, such as the “ELISA” test, but also in the field of drug discovery.

BIG ADVANCES MADE POSSIBLE BY TINY SAMPLE SIZES

In their efforts to discover new drugs, the R&D labs of pharmaceutical companies analyze vast numbers of samples. It is for this reason that companies and research institutions have a great interest in novel ways to perform this analysis cheaper, faster and more accurately. Singapore-based Curiox Biosystems has developed breakthrough nanotechnology-based analysis equipment for the life sciences which reduces the required sample size by up to 98 percent – and cuts the cost and time to perform these tests by more than one half. The revolutionary DropArray™ analysis system from this Nanostart portfolio company has been recognized with numerous prestigious awards, and its CEO, Dr. Namyong Kim, has won praise for his successful leadership.

The size of the company's key target markets, in both research and diagnostics, is estimated at more than USD 1.2 billion. The users of its new technology include not only pharmaceutical corporations and biotech companies but also research institutions and hospitals. It finds application in various kinds of life science laboratories, such as the "high throughput screening" labs used in drug discovery in which many thousands of aqueous samples are simultaneously tested for drug activity.

Groundbreaking new technology

Until now, this kind of high-volume automated testing has been conducted using microtiter plates, which are postcard-

▶

sized plastic plates lined up with small “wells” in which the samples are deposited together with reagents. In conventional microtiter plates, these wells are separated with physical walls to avoid mixing of the samples.

At the heart of the new technology from Curiox is the idea of using microtiter plates without walls. So that the samples do not mix with their neighbors, Curiox has developed new-generation microtiter plates which alternate hydrophobic (water repelling) areas with hydrophilic (water attracting) areas, upon which the aqueous samples are deposited. A special hydrophobic “rinsing oil” then forms virtual walls between the samples, preventing them from contaminating each other. This innovation generates enormous savings in the amounts of sample and reagent required and cuts the time required to perform the analysis significantly.

Just two microliters are enough

Curiox Biosystems is a spin-off of Singapore’s famed Institute of Bioengineering and Nanotechnology (IBN). Its DropArray™ analysis station is already on the market and has, for example, been used with great success by the Singapore Eye Research Institute (SERI) since the start of 2009. By using the new technology from Curiox, clinical researchers there are now able to examine tear samples and diagnose diseases of the eye faster, cheaper and more efficiently than has ever been possible, which in turn means that patient treatment can commence much sooner. Just two microliters of tear fluid are enough for precise test results. In the past 40 to 100 microliters were required.

In July 2009, Curiox gained an internationally recognized scientist with the appointment of Professor Alex Matter to its board of directors. Dr. Matter is a well-known figure in medical research, notably for his successful spearheading of the development of the drug Glivec®/ Gleevec® for treating chronic myeloid leukemia (CML).

In late October 2009, Nanostart increased its shareholding in Curiox Biosystems to almost 19 percent. The additional investment was made through the Nanostart Singapore Early Stage Venture Fund I, which is managed by Nanostart Asia. With this additional funding, the company is now driving forward into international markets, particularly in the U.S., Europe and Japan, with its latest product innovation, the DropArray™ HT200.

International recognition

At the start of 2010, Curiox was selected as the winner of the Innovation AveNEW Award at the world’s largest conference for laboratory automation in the life sciences. This prestigious prize is awarded to start-ups with pioneering technology and excellent management. Just a few weeks later it was recognized as “Emerging Company of the Year” in the BioSpectrum Asia Pacific Awards 2010. In April 2010, Curiox CEO Dr. Namyong Kim was chosen for the 2010 Scientist-Entrepreneur Award from A*STAR, the Singapore Agency of Science, Technology and Research.

BASIC FACTS

Industries
Life sciences, diagnostics

Technology
Platform technology to dramatically reduce the amount of sample and reagent needed for laboratory testing, while simultaneously shortening reaction time

Applications/target industries
Routine biochemical analysis and medical diagnostics

Number of staff 12

Patents 3

Company phase Growth financing

Founded 2008

Primary office Singapore

INVESTMENT POTENTIAL

Significant savings in time and cost create decisive competitive advantage for Curiox

Significant savings in time and cost create decisive competitive advantage for Curiox

High market potential for both testing equipment and reagents

MANAGEMENT

Dr. Namyong Kim, CEO

TRANSACTION DETAILS

Initial investment 2007

Situation Growth financing

Ownership stake 19 percent
Curiox is being financed through the Nanostart Singapore Early Stage Venture Fund.

CONTACT

Curiox Biosystems Pte Ltd
180 Ang Mo Kio Avenue
8 Block N, Unit # 701
Singapore 569830
T +65 6459 2312
F +65 6459 2312
sales@curiox.com
www.curiox.com

HOLMENKOL AG HEIMERDINGEN, GERMANY

Nanotechnology-based products from Holmenkol dramatically reduce the adverse effects of surface friction, water and ice adhesion, and dirt adhesion, thus raising the bar for international competition sports.

NANOTECHNOLOGY ON THE WINNER'S PODIUM

A ski slope can be freshly blanketed with powder, or crusted with old snow. Snow can fall in large or small flakes, and depending on the temperature, it can be dry, sticky or downright wet. And artificial snow presents yet another whole set of ski conditions to deal with. In selecting the right ski wax, these are all factors which must be taken into consideration. Germany's Holmenkol AG, the world's oldest producer of ski wax, is the expert when it comes to this. Some 47 national teams in Alpine and Nordic winter sports use Holmenkol products to gain a competitive edge. Ski waxes, however, are but one part of the broad range of products which this company has developed using the latest advances in nanotechnology.

Since 2002, Holmenkol has been using nanotechnology to offer a wide range of new-generation products and coatings for competition sports and outdoor activities whereever surfaces come into contact with water, snow or ice. In addition to its famed ski waxes, the company's product line, protected with 19 different patents, includes waterproof coatings, detergents, protective coatings and polishes for a wide range of outdoor, cycling and aquatic sports. With these many products, Holmenkol has dramatically expanded the market for its innovations, originally developed for world champion athletes, to encompass amateur athletes and leisure enthusiasts.

▶

High-end products for the boom market in outdoor sporting goods

With the help of nanotechnology, long-lasting treatments can now be applied to functional sports clothing so that it repels water and dirt, while simultaneously providing enormously improved resistance to wear and abrasion. In the area of boating, Holmenkol develops products which improve the mechanical, aerodynamic and aquadynamic characteristics of pulleys, sails and hulls. With its nanotech-based coatings, the slowing effects of mechanical friction can be reduced by almost one half. Nanotechnology-based cleaning and care products from Holmenkol provide superior protection for the teakwood surfaces on boats which are vulnerable to sun and harsh weather. Other product applications from Holmenkol include specialized detergents for outdoor and leisure products, protective coatings which help bicycle frames to repel dirt, better lubricants for bicycle chains, and anti-fog coatings for glasses and goggles.

Holmenkol learns from the best

In developing new products, the research and development department at Holmenkol has an unsurpassed source of practical expertise, namely the champion athletes who actually use its products in world competitions.

Strong growth

Holmenkol closed its fiscal year 2008/2009 (ending March 31, 2009) with a gain of 25 percent in its sales revenues, a healthy upward trend which has continued into the first quarter of the new fiscal year. The increases in its Texture Protection, Bike and Aquatic product lines were particularly strong. Its international sales offices have also been performing well, with its newly established subsidiary in Japan generating seven-digit revenues in its very first year. In addition to its subsidiaries in Austria and Japan, the company has also added a sales subsidiary in Norway. Further international offices are planned as Holmenkol pushes forward with its strategy to build a long-term global presence.

In the U.S. market, where great efforts are being made to build a major market position in the Snow and Aquatic product lines, Holmenkol is rapidly expanding with strong distribution partners in four different states. In addition, the company is expanding its distribution structure in the Canadian market in cooperation with leading ski producer HEAD.

In its home market of Germany, Holmenkol has been able to launch additional cooperation agreements with heavyweight distribution partners, including with cycle brake manufacturer Magura, with ski manufacturer Völkl, and with LEKI, the market leader in poles for skiing, hiking, trekking and Nordic walking.

BASIC FACTS

Industries
Sports technology

Technology
Development of chemical surface systems and nanotechnologically optimized coatings

Applications/target industries
High-performance ski waxes, anti-friction coatings for aquatic sports, specialized detergents and hygienic products, waterproofing treatments for outdoor activities, cleaning and lubricant products for cycling sports

Number of staff 28

Patents 19

Rechtsform German stock corporation (AG)

Founded Brand founded 1922, current company formed 2002

Primary office Heimerdingen, Germany

INVESTMENT POTENTIAL

Products with revolutionary characteristics for the growing global sports market

Unrivaled position in global niche market

High growth potential, particularly in winter sports, outdoor and leisure activities, cycling and aquatic sports

MANAGEMENT

Karim Grüber, Managing Director

TRANSACTION DETAILS

Initial investment 2007

Situation Growth financing

Ownership stake 50 percent

CONTACT

Holmenkol AG
Wernher-von-Braun-Strasse 3
D-71254 Heimerdingen
Germany
T +49 (0)7152 6101-0
F +49 (0)7152 6101-119
info@holmenkol.com
www.holmenkol.com

ITN NANOVATION AG SAARBRÜCKEN, GERMANY

Using advanced nanoceramics, ItN Nanovation is pioneering efficient new ways to treat and purify water with technology which is helping to solve the world's shortage of clean water.

WORKING WONDERS WITH CERAMICS

Studies, by UNESCO among others, project that by the year 2030, some five billion people will, if action is not taken soon, not have adequate access to clean water. The limited supply of usable water is becoming a topic which is affecting more and more people and geographic regions. With the help of nanotechnology, ItN Nanovation AG is offering new solutions which stand to dramatically change this troubling situation.

The company has developed nanoceramics which are extraordinarily effective at filtering contaminants. Depending on the pore size, they can also serve for microbiological filtration. Using its patent-protected technology, ItN Nanovation produces its CFM Systems® ceramic flat filter membranes which deliver excellent water purification at maximum filtration rates. The advantages of ceramic filters over conventional polymer filters are immense: They are much more robust, with long service lives and simple cleaning. They also, unlike polymer filters, are resistant to UV and ozone, allowing them to be built directly into integrated water treatment systems which use these as part of the treatment process. The flat filter membrane systems from ItN Nanovation are so effective, in fact, that often just a single pass is sufficient, saving not only space but also considerable cost. Their reliability and ease of use offer further savings in operating and maintenance expenses.

▸

Multiple applications

The possible uses of this new nanoceramic-based filtration technology already range from energy-efficient, cost-effective treatment of wastewater to pre-treatment of drinking water. It could also find application in separating oil from water. In 2009, ItN Nanovation was awarded a major contract to build a decentralized water treatment system in Germany using its CFM Systems® solution. Another project is underway in Saudi Arabia, where a large water desalination facility is being built in a joint venture with a renowned regional partner. In addition, the company announced a pilot project in Malta for compact water treatment units built into standard-sized shipping containers. Series production should begin later in 2010.

More recently, in May 2010, the company announced another major order from a customer in Saudi Arabia, where its nanoceramic membranes will be used for pre-filtration to improve the performance of subsequent reverse osmosis processing for drinking water production. Follow-on orders of significantly larger scale are possible as soon as later this year.

Longer-term potential is being offered by a project in Canada to use the ItN technology to separate oil from water, where the production of oil from tar sands generates large quantities of this problematic oil-water waste mixture.

Building a technology holding company through joint ventures

In May 2009, Lutz Bungeroth took the helm of ItN Nanovation as its new CEO, an experienced manager who understands both the enormous potential of CFM technology and how to optimally bring it to market. At the international level, this often means making use of stand-alone joint ventures where, in this case, the value contributed by ItN Nanovation is primarily its technology and know-how. “It is important to note,” explains Bungeroth, “that we are not selling our patents to the joint ventures outright but rather contributing usage rights.” The aim is, over time, to develop a technology holding company with arms for R&D, for engineering and for customer service. In short, the outlook for nanoceramics is highly promising.

The nanotech-based ceramics from ItN Nanovation can also be used for coatings. These find application, for example, in power generation boilers and chimneys, where by reducing combustion residue they improve energy efficiency and thus ultimately reduce operating costs for energy providers. Yet another product line, called Nanocomp MetCast, is insensitive to wide temperature swings and offers low adhesion to molten metal, making it ideal for non-ferrous melting and casting operations. At the start of 2010, the company welcomed Qatalum, one of the world’s largest primary aluminum producers, as a new customer; other aluminum producers are likewise expressing great interest in Nanocomp MetCast.

The production of nanoceramics is, surprisingly, based on water. “The core of our know-how,” explains Bungeroth, “lies in our understanding of how one can form nano-sized ceramic crystals in water and control the growth of these structures.“

BASIC FACTS

Industries
Cleantech

Technology
Production of high-grade ceramic powder, as well as the abrasion-resistant, self-cleaning coatings and filters made from it

Applications/target industries
Filters for water treatment, ceramic coatings for metal foundries and power plants offering superior operating efficiency and thus total cost savings

Number of staff 50

Patents more than 110 applied for, of which more than 50 granted so far

Company phase Exchange-listed

Founded 2000

Primary office Saarbrücken, Germany

INVESTMENT POTENTIAL

Successful market introductions and new product launches together with proven and highly capable commercial partners

Technological lead protected by patents

Its high-performance nanoceramic filters and coatings position ItN Nanovation to benefit from two of the great growth markets of the 21st century: water and energy

MANAGEMENT

Lutz Bungeroth, CEO
Florina Ley, Head of Finance
Jörg Dilly, Head of Sales
Dr. Frank Meyer, Head of Research & Development

TRANSACTION DETAILS

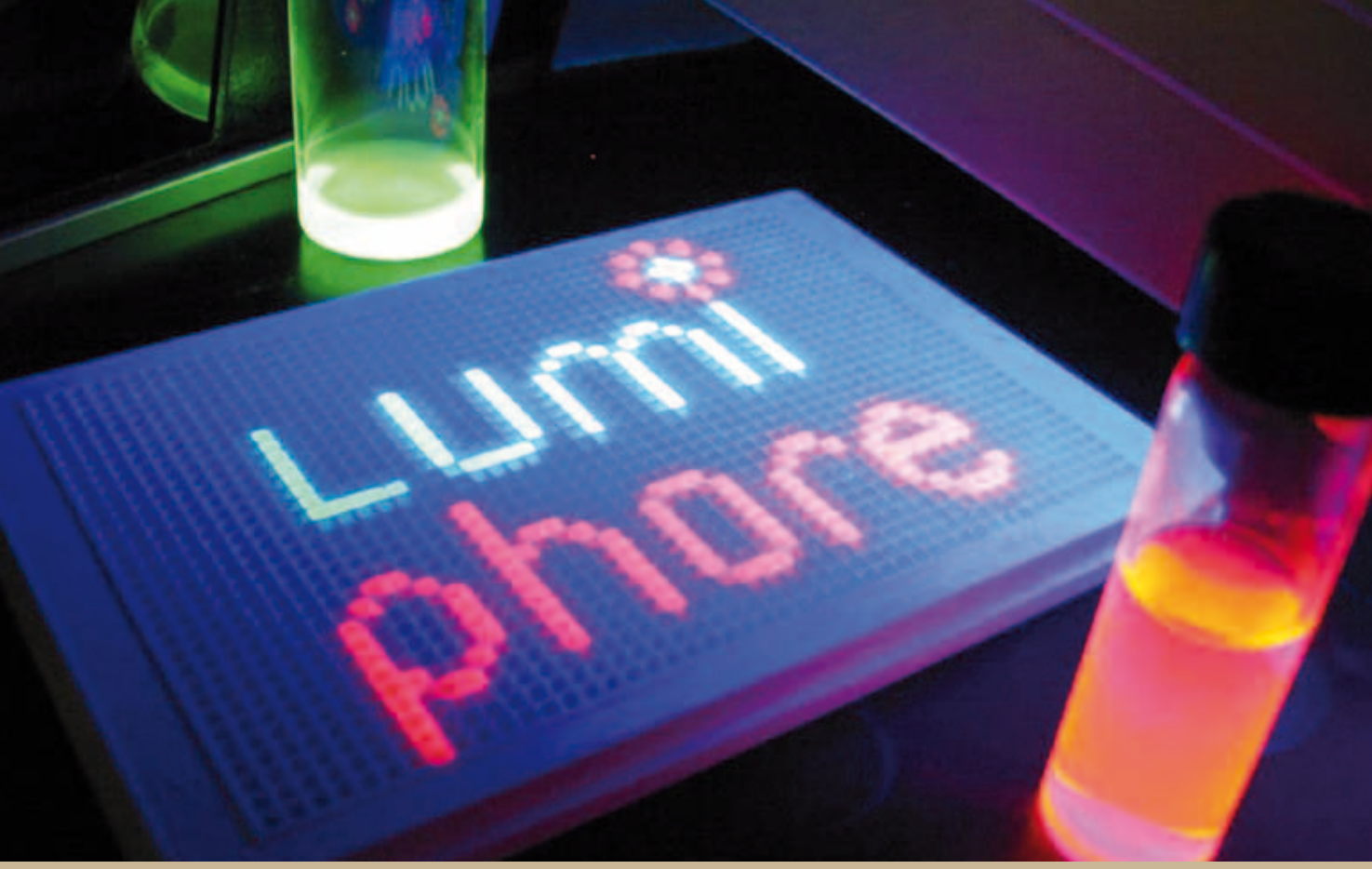
Initial investment 2005

Situation Growth financing

Ownership stake 25.8 percent

CONTACT

ItN Nanovation AG
Untertürkheimer Str. 25
66117 Saarbrücken
Germany
T +49 (0)681 5001-460
F +49 (0)681 5001-499
info@itn-nanovation.de
www.itn-nanovation.de



LUMIPHORE INC., RICHMOND, CALIFORNIA

Through the new kinds of quick drug test and highly efficient biodetectors enabled by its technology, Lumiphore is revolutionizing an entire field of the life sciences industry.

A SHINING EXAMPLE FOR THE LIFE SCIENCES INDUSTRY

Whether for discovering better methods to treat disease using drugs, for analyzing the genetic clues provided by DNA, or in screening for illegal drugs, there is a tremendous need for better ways to test for the presence of certain biomolecules such as enzymes or fatty acids in the human body. To do this, scientists employ special reagents which bind together with the substances of interest, enabling them to be identified. Because of their harmful side effects and high cost, the radioactive substances formerly used for this purpose are quickly becoming a thing of the past. Today, scientists are using a new generation of fluorescent reagents which emit colored light as soon as they react with the molecules of interest. One of the fluorescent substances used for this purpose are metallic elements called "lanthenides". And this is what Silicon Valley-based Lumiphore is all about.

Lumiphore develops and markets analytical systems for the life sciences industries based on light-emitting lanthenide complexes. The lanthenide complexes from Lumiphore offer unique characteristics which make them ideal for the automated testing procedures used to analyze biosamples widely used in research: high sensitivity, reliability and robust luminescence over an extended period of time.

The potential areas of application of these new "biodetectors" are many. They can be used to detect the presence

▸

of toxic substances in the body, or to monitor the effects of medications. Other uses include tests for environmental pollutants, for allergens, for illegal drugs or for doping in competition sports.

The market for these tests in clinical and research laboratories, currently estimated at over USD 1 billion per year, is forecast to growth at a rate of 25 percent annually.

It is in this important market that the technology from Lumiphore shines as a beacon for the future.

Focusing on core competence and growth through partnerships

Lumiphore concentrates on the production and advanced development of the core technology: its proprietary lanthanide complexes. It leaves specific applications to its cooperation partners, to whom Lumiphore sell these remarkable metallic particles along with generally non-exclusive technology licenses. Several of these cooperation agreements have already been signed to date. The company's successful partnership with Cisbio, a leading provider of analytical tools for the biotech industry based in France, is already generating revenues.

In June of 2009 Lumiphore entered into another successful partnership with the German diagnostics company Brahms AG and its subsidiary Cezanne under which Brahms acquired the non-exclusive rights to incorporate Lumi4® technology into current and future diagnostic tests as well as the exclusive rights to use the technology in diagnostic tests for Down's Syndrome including trisomy 21, 13 and 18, triploidy, translocation, and mosaicism. In making its decision, the senior management of Brahms cited the decisive advantages of the new technology from Lumiphore: Detection sensitivity and simplicity of use along with significant cost reductions in reagent use, labor, and reader platforms.

Yet another cooperation, with Biophor Diagnostics Inc. of California, covers the development of quick drug tests which can detect six illegal substances at the same time. The market for the new product includes police use. The new testing procedure should significantly surpass existing methods in terms of stability, sensitivity and robustness.

BASIC FACTS

Industries
Life sciences

Technology
Nanodetectors based on fluorescent lanthanide complexes

Applications/target industries
Research and development in the pharmaceutical and biotechnology industries, medical diagnostics, testing for illegal drugs and sports doping, detection of environmental contaminants and genetically modified food products

Number of staff 8

Patents n.a.

Company phase Pre-IPO

Founded 2001

Primary office Richmond, California, USA

INVESTMENT POTENTIAL

Silicon Valley spin-off from UC Berkeley with the potential to revolutionize an entire area of the life sciences industry. Its patented technology enables new kinds of quick drug tests and highly efficient biodetectors

Major growth potential in the areas of diagnostics, DNA analysis and high-throughput drug discovery

MANAGEMENT

Kenneth N. Raymond, CEO
Nathaniel G. Butlin, CSO
Stephen H. Blose, Chief Business Development Officer

TRANSACTION DETAILS

Initial investment 2005

Situation Growth financing

Ownership stake 20 percent

CONTACT

Lumiphore, Inc.
4677 Meade Street, Suite 216
Richmond, CA 94804
USA
T +1 510 232 8455
info@lumiphore.com
www.lumiphore.com

MAGFORCE NANOTECHNOLOGIES AG BERLIN, GERMANY

The new Nano-Cancer® therapy from MagForce Nanotechnologies fights cancer using iron oxide nanoparticles which, through the application of a magnetic field, generate heat directly within the tumor. Clinical trials have demonstrated its effectiveness, with only modest side effects.

magforce®
NANOTECHNOLOGIES AG

A MILESTONE IN CANCER TREATMENT

Cancer is, after cardiovascular disease, the second leading cause of death. In Germany alone, some 420,000 people are newly diagnosed with cancer each year, and worldwide the figure is more than 12 million. For patients, a diagnosis of cancer generally marks the beginning of period of much pain, suffering and unpleasantness. And unfortunately, a good part of this often results from the treatment itself, as today's conventional therapies – surgery, chemotherapy and radiation – are all generally coupled with significant side effects and patient discomfort. But MagForce Nanotechnologies AG has developed a new procedure based on nanotechnology which fights cancerous tumors in a uniquely targeted way, with minimal side effects. In clinical trials, it was able to more than double the survival time of brain tumor patients who had exhausted other therapeutic options. An application for EU regulatory approval is now pending.

The many decades of clinical research beyond conventional cancer therapies provide a solid basis of scientific knowledge about their effects. The side effects involved, however, often pose a heavy burden on patients, impairing quality of life. The new Nano-Cancer® therapy from MagForce Nanotechnologies destroys tumors from the inside out, but with only modest side effects and minimal

▶

patient discomfort. As a world-leading company in the use of nanotechnology in the war against cancer, MagForce Nanotechnologies is well on the way to its goal of establishing Nano-Cancer® therapy as the fourth pillar of cancer treatment alongside the existing standard methods of surgical resection, radiation and chemotherapy.

The new therapy first involves the injection of magnetic iron oxide nanoparticles into the tumor. This minimally invasive procedure is, from the patient's point of view, comparable to a needle biopsy.

The special fluid containing these nanoparticles, some 500 times smaller than red blood cells, is drawn into the tumor tissue but not into the surrounding healthy tissue. A magnetic field is then applied externally, causing the magnetic nanoparticles to oscillate and thus to generate heat. By precisely regulating the magnetic field, controlled temperatures of up to 70°C (158°F) can be attained within the tumor. This heat destroys the tumor cells so that they can be eliminated through the body's natural metabolism. And because the heat is generated directly inside the tumor, the surrounding healthy tissue is spared.

Clinical studies have shown this new technology to be significantly more effective than existing methods of treatment. In early November 2009, the results were published from clinical trials in patients with recurrent glioblastoma, a particularly aggressive form of brain tumor which, despite treatment with conventional therapies, had regrown. Following treatment with Nano-Cancer® therapy in conjunction with radiotherapy, median survival time in the patient group following initial diagnosis of tumor recurrence was 13.4 months, which was significantly longer than the 6.2 months observed in a control study involving existing standard treatment methods. An application has been submitted for EU-wide regulatory approval, which MagForce expects to receive very shortly.

The ultimate aim is to gain approval to treat all forms of solid tumors with Nano-Cancer® therapy. Toward this end, a number of different clinical studies involving different forms of cancer are now in progress. Research efforts also continue to further develop the potential of this technology, particularly in the area of drug delivery, where medications could be attached to the nanoparticles and likewise delivered directly into tumors through the application of heat.

Once regulatory approval is received, MagForce will move forward with commercialization. To ensure that adequate capital resources are in place, an investment agreement was signed in May 2010 with YA Global, a U.S. investment fund, which will provide the company with access to an additional EUR 20 million of equity. This puts MagForce in a comfortable financial position not only with respect to the approaching market launch but also for further expanding its R&D pipeline.

BASIC FACTS

Industries
Medical technology

Technology
Intratumoral thermotherapy using magnetic nanoparticles

Applications/target industries
Hospitals, cancer treatment centers

Number of staff 50

Patents 5 international licensed patent families (for nanoparticles) and 11 other international patent families

Company phase Exchange-listed

Founded 1997

Primary office Berlin, Germany

INVESTMENT POTENTIAL

Procedure which stands to revolutionize a highly profitable, multi-billion-dollar market

Potential to become the "fourth pillar of cancer treatment" alongside surgery, chemotherapy and radiation

Effective new way to treat tumors with only modest side effects

MANAGEMENT

Dr. Peter Heinrich, CEO
Dr. Andreas Jordan, founder and CSO

TRANSACTION DETAILS

Initial investment 2004

Situation Growth financing

Ownership stake approx. 73 percent

CONTACT

MagForce Nanotechnologies AG
berlinbiotechpark
Building 5.2
Max-Dohrn-Str. 8-10
10589 Berlin
Germany
T +49 (0) 30 308380-0
F +49 (0) 30 308380-99
info@magforce.com
www.magforce.com

NAMOS GMBH DRESDEN, GERMANY

The technology from Namos can reduce the precious metals needed for the production of automotive catalytic converters by up to one half, a potential global savings of billions of dollars each year.

LESS CAN BE MORE, EVEN IN A CATALYTIC CONVERTER

Since the dawn of the motor car in the late nineteenth century, automobile manufacturers have invested heavily in research and development efforts, with ever more pressure to differentiate themselves from competitors through innovations. The complexity of the modern automobile continues to provide numerous opportunities for technical advances. It is thus, like few other products, an ideal showplace for the vast breadth of applications which nanotechnology offers: from tires to lighting, from engine and transmission components to shining exteriors, to all the electronics found in a modern automobile. Every person who buys a new car today can testify to the advances which are being made, and the benefits which they provide. Namos GmbH, based in the German city of Dresden, is hard at work on a major automotive innovation based upon nanotechnology which should help auto manufacturers and their supplies to reduce costs while conserving natural resources.

Namos has developed a novel proprietary technology which enables up to one half of the precious metal required for automotive catalytic converter production to be saved.

In a catalytic converter, only the precious metal on the exposed surface is catalytically active. The substrate material needed to create this large surface area is, however, porous, which means that when it is immersed in the spe-

▸

cial salt solution which coats these surfaces with precious metal, a significant portion of the solution enters into these tiny pores. This portion of the precious metal is wasted, since the deposits within the pores are not exposed to the exhaust gases as they flow through the catalytic converter.

With its patented bionanotechnology-based process, Namos has developed a way to prevent the salt solution from being drawn into the pores, so that the precious metal is deposited only on the active surface. One can imagine this as a network of molecules which blankets the substrate, preventing the costly solution from penetrating below the surface. This innovation thus allows the precious metal to be deposited only on the exposed surface, where it can react with the exhaust gases.

Dramatic savings in precious metal costs

Each year, some 225 metric tons of "new" (non-recyclable) precious metals are used around the world for automotive catalytic converters, corresponding to a total value of between six and eight billion U.S. dollars. Roughly half of this amount could be saved by using the new technology from Namos. The process can be readily integrated into existing production lines, and the biomolecular coating is quickly burned off the first time that the catalytic converter is put into use, leaving no residue. It contains no toxic substances and has shelf life which is more than adequate for production purposes.

Moving quickly toward market launch

In its rapid march to commercialization, Namos is already holding discussions with leading producers of catalytic converters who supply both the major automobile producers and the auto parts aftermarket.

In June 2009, Namos GmbH was chosen by a judging panel of 20 leading figures from business, academia and government as the winner of the annual IQ Innovation Awards for Central Germany within the Automotive category. This award testifies to the significance of the new technology from Namos and to the enormous innovative potential which it holds out.

In early 2010, Nanostart decided to increase its shareholding in Namos from 15 to 26 percent. Germany's ERP Start Fund, also a shareholder in Namos, likewise increased its investment. The ERP Start Fund is a joint program of the Kreditanstalt für Wiederaufbau (KfW), the German government-owned development bank, and the German Federal Ministry of Economics and Technology.

BASIC FACTS

Industries
Environmental technology

Technology
Platform technology to develop catalytically active surfaces which deliver the same performance with significantly less precious metal

Applications/target industries
Automotive

Number of staff 7

Patentfamilien 5

Company phase Early Stage

Founded 1998

Primary office Dresden, Germany

INVESTMENT POTENTIAL

Breakthrough innovation in production technology for catalytic converters

High revenue potential in the automotive industry, where billions are spent each year on precious metals for catalytic converters

Platform technology with potential applications in other industries

MANAGEMENT

Dr. Jürgen Hofinger, CEO

TRANSACTION DETAILS

Initial investment 2008

Situation Growth financing

Ownership stake Approx. 26 percent

CONTACT

Namos GmbH
Tatzberg 47
01307 Dresden
Germany
T +49 (0)351 796 572-0
F +49 (0)351 796 572-1
info@namos.de
www.namos.de

NANOGRAM CORPORATION MILPITAS, CALIFORNIA

NanoGram is renowned for its groundbreaking innovations in thin-layer solar cells and printed electronics. The required nanoparticles are produced in-house using a special patented process.

MASTER BUILDERS IN SILICON

Silicon is, after oxygen, the second most abundant element in the Earth's crust. But for most people, the first thing we think of when we hear "silicon" is "computer chips". In the booming market for solar panels, silicon is likewise indispensible for producing photovoltaic cells. It is this remarkable element which underlies the business of NanoGram Corporation, appropriately based in California's Silicon Valley. The company is a pioneer in applying nanotechnology to silicon, whether for making solar cells which are more efficient or special silicon inks with which electronic components can be printed.

Using its patented Laser Reactive Deposition (LRD™) process, NanoGram is uniquely able to deposit silicon in just a single processing step, saving material and energy. And thanks to its technology, NanoGram is able to work with extremely pure silicon, producing solar cells which are up to 17 percent more efficient than those produced with conventional thin-layer technology. By passing these cost savings on to the market, NanoGram is able to gain a significant competitive advantage, as the price-performance ratio of solar panels is absolutely critical to the buying decision.

New dimensions in printed electronics

With its platform technology, NanoGram is also able to produce electronic printing ink made of silicon nanoparticles which can be used to make a wide range of printed electronics, meaning electronic components which are li-

▸

terally “printed” onto a substrate, except that instead of conventional ink, a special ink with electronic properties is used. Today, printed electronics may be found in a wide range of products such as large-screen displays, automotive dashboards and the touch keys in mobile phones. In the not-too-distant future, they will enable many more products such as flexible displays, organic light-emitting diodes (OLEDs) for room lighting, flexible solar panels, and even applications which cannot yet be imagined.

Compared to conventional electronic components, the printed electronics from NanoGram are cheaper as well as more flexible in application. The company is already a recognized leader in printed electronics – and a sought-after cooperation partner within the industry. In 2009, for example, a development agreement was signed with Teijin Ltd. of Japan under which the two companies will work jointly to optimize the silicon ink technology from NanoGram for use with the flexible substrates from Teijin.

Strong presence also in Asia

Through its subsidiary NanoGram KK in Shinjuku, Tokyo, the company is building a growing presence in the Japanese market, while industrial customers in Korea are served by a branch office in Seoul. NanoGram has also entered into a strategic partnership for development and production with Nagase ChemteX Corp., a subsidiary of Japan’s Nagase & Co., Ltd.

BASIC FACTS

Industries
Solar energy, electronics

Technology
Patented laser technology for the production and coating of nanoparticles

Applications/target industries
Solar energy, batteries, display technology, printed electronic components

Number of staff 64

Patents 07 U.S. and international patents, additional 80 U.S. patents pending application

Company phase Pre-IPO

Founded 1996

Primary office Milpitas, California, USA

INVESTMENT POTENTIAL

The platform technology from NanoGram is already meeting needs in two major growth markets: thin-film photovoltaics and printed electronics

The company has established successful cooperations with numerous Japanese and U.S. market leaders in their respective market areas

MANAGEMENT

Dave Corbin, Chief Executive Officer
Dr. Shiv Chiruvolu, Chief Technology Officer
Clifford Morris, Vice President of Global Business Development
Scott Ferguson, Vice President, Advanced Materials

TRANSACTION DETAILS

Initial investment 2007

Situation Growth financing

Ownership stake 1 percent

CONTACT

NanoGram Corporation
165 Topaz Street
Milpitas, CA 95035
USA
T +1 408 719 5300
F +1 408 262 6290
info1@nanogram.com
www.nanogram.com

NANOSYS PALO ALTO, CALIFORNIA

With many hundreds of patents to its name, Nanosys is a world leader in the development and construction of electronic nanostructures, which are the foundation for next-generation LEDs, ever smaller storage devices, and flexible circuit boards and solar cells.

QUANTUM DOTS FOR QUANTUM LEAPS IN ELECTRONICS

For room lighting and other applications involving illumination, light emitting diodes (LEDs) are not only the future but also the present: "present" because they can already now be found in countless electronic products such as mobile phones, notebook computers and display screens – and "future" because experts foresee highly energy-efficient LEDs replacing virtually all of the lighting products found on the market today, including even the recent low-energy light bulbs. The technology which will make these advances in LEDs possible is called "quantum dots". And the world's pioneering builder of these electronic nanostructures, with more than 750 patents to its name, is Nanosys, based in Palo Alto in the heart of California's Silicon Valley.

Quantum dots are fluorescent particles just a few nanometers in size. Although the dots themselves are invisible to the naked eye, they emit an intense, bright light when they are exposed to a violet or ultraviolet light source. Quantum dots, however, represent much more than just the basis for new-generation LEDs which are brighter and use less energy. They are also the technology which enables even smaller storage devices, fuel cells in mobile devices, and flexible circuit boards and solar cells.

The future belongs to nano-optimized LED flat screens

In January of 2010, Nanosys signed a cooperation agreement with LG Innotek, part of the Korean electronics giant

▶

LG Group. The agreement ensures not only many years of guaranteed sales for components but also marks the first commercial application of quantum dots in the consumer electronics industry. Using Quantum Rail™ technology from Nanosys, LGIT will be the first company anywhere in the world to deliver the new generation of ultra high color gamut displays to its customers, including the LG Group itself. These next-generation displays, for applications such as mobile devices, stand out for the extraordinarily high color quality made possible by their expanded color spectrum. The new LEDs should begin to appear in mobile devices such as smart phones and notebook computers later this year.

Quantum dots are likewise the centerpoint of a new cooperation agreement signed between Nanosys and Life Technology, a multi-billion-dollar life sciences corporation. The objective of this partnership is to develop new and better ways to protect pharmaceutical and diagnostic products from counterfeiting, a chronic problem which costs legitimate producers an estimated one billion U.S. dollars each year. The products will be protected from quantum dots from Nanosys which fluoresce under UV light. This new technology should help to conquer the scourge of counterfeiting not only in pharmaceuticals and diagnostics but also in industries such as food and beverage products, consumer electronics, and luxury goods. They could also be used to ensure the authenticity of currency, documents and valuables such as art objects.

Nanosys has initiated a number of other important cooperation agreements, including with biotech companies QuantuMDx Group and Vista Therapeutics as well as with world-renowned Harvard University.

QD Soleil: Bringing together expertise in solar energy

Nanosys established a 100%-owned subsidiary, QD Soleil, in 2009 in order to bring together its extensive know-how in solar energy in a single focused business. QD Soleil is making great efforts to significantly improve the efficiency of solar cells while simultaneously reducing production costs.

The technology from QD Soleil, through which solar cells may be made which are flexible and even transparent, stands to dramatically broaden their areas of application – for example, for use on the exterior walls of buildings or on car roofs.

The immense expertise in solar energy within this newly formed Nanosys subsidiary is particularly relevant in view of the increasing importance of renewable energy to U.S. government policy. With the recently increased focus on “green” energy, it is anticipated by many that the U.S. will, within the next five years, become the world’s largest market for solar collectors.

BASIC FACTS

Industries
Life sciences, environmental technology, IT/electronics

Technology
Platform technology to synthesize specialized nanomaterials for flexible, highly efficient electronic components

Applications/target industries
Storage systems, fuel cell-based power packs, solar cells, optical systems

Number of staff 80

Patents over 750 patents and patent registrations

Company phase Pre-IPO

Founded 2001

Primary office Palo Alto, California, USA

INVESTMENT POTENTIAL

Partnerships with major corporations open new distribution channels and enable superb market penetration while ensuring world-class expertise in manufacturing processes

Extraordinarily broad technology portfolio and know-how offers the potential for products and applications across an extremely wide range of industries, including lucrative markets such as energy, computers and electronics, the defense industry, and life sciences

MANAGEMENT

Jason Hartlove, President and Chief Executive Officer
Andrew Filler, Esq., Vice President of Intellectual Property
Jurgen Hofler, Ph.D, Vice President of Operations and Engineering
Victor Hsia, Vice President, Worldwide Sales and Marketing
John Page, Chief Financial Officer
J. Wallace Parce, Ph.D, Senior Science Advisor

TRANSACTION DETAILS

Initial investment 2006

Situation Growth financing

Ownership stake 1 percent

CONTACT

Nanosys, Inc.
Corporate Headquarters
2625 Hanover Street
Palo Alto, CA 94304
USA
T +1 650 331-2100
F +1 650 331-2101
info@nanosysinc.com
www.nanosysinc.com

STRATEGY

Our task is to maintain regular and sustained communications with our institutional and individual investors. Our aim is to build confidence through transparency.

Building confidence through transparency

Although Nanostart AG is still in the phase of building up its investment portfolio, the company is gaining ever more interest from equity investors, both institutional and individual. Greater importance is thus being placed on effective communication with these target groups. It is the aim of Nanostart to build investor confidence through maximum transparency.

In addition to general communications channels in both English and German, such as our corporate website, our newsletter, and our frequent press releases on developments of interest within Nanostart and its portfolio companies, we place a priority, to the extent possible, on personal communications. Until recently, this primarily consisted of promptly responding to inquiries from existing investors, potential investors and the media. In the spring of 2009, in response to enthusiastic feedback from investors, Nanostart brought an investor relations professional on board. Through the remainder of the year, we intensified our efforts to engage in active dialog with the investor community through participation in various capital markets events and conferences. While a number of these were held in Frankfurt, the financial capital of Germany, Nanostart has increasingly been represented at important U.S. investor events:

Small & Mid Cap Conference
February 5, Frankfurt

Invest 2009
April 25, Stuttgart

Entry and General Standard Conference
May 4, Frankfurt

Seven Sins - Seven Chances Conference
May 20, Munich

RedChip Small-Cap Investor Conference
June 16, Ft. Lauderdale

Roadshow
June 24 - 26, New York

7th Small Cap Conference
September 2, Frankfurt

Rodman & Renshaw Annual Global Investment Conference
September 9, New York

Roadshow
October 2, Hamburg

Investor Dinner
November 5, New York

In addition, Nanostart held its first investor "webinar" on May 20, featuring an interactive presentation by CEO Marco Beckmann followed by questions from online participants.

Limitations to transparency

Transparency in communications at Nanostart is, by virtue of our business model, inherently subject to certain limitations, particularly where its own interests are not entirely congruent with the interests of the companies in which it invests. Investment agreements generally involve confidentiality agreements which prohibit Nanostart from disclosing sensitive business information which it has acquired in its activities with these companies. Because these portfolio companies operate in a competitive market environment, the safeguarding of this confidential information is of vital importance. For this reason, Nanostart does not have sole discretion over the information which it publishes with respect to privately held companies which are not subject to their own exchange listing obligations. This situation is, however, different for exchange-listed portfolio companies which are subject to their own transparency requirements and ongoing obligations to provide information to shareholders.

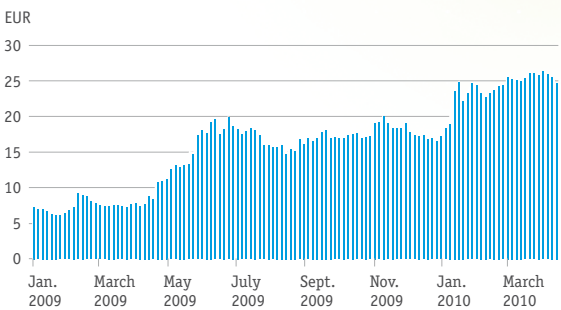
German Corporate Governance Code

Nanostart places great importance on adhering to the highest standards of corporate governance. As a company listed in the Entry Standard segment of the Frankfurt Stock Exchange, Nanostart is not obligated to make a declaration regarding the extent of its compliance with the recommendations of the German Corporate Governance Code. The management and supervisory board are, however, considering whether to publish such a declaration of compliance in the future.

Nanostart included in Deutsche Börse index

As a mark of their increased market liquidity, shares in Nanostart AG are now included in the DAX International Mid 100, an equity index of the Deutsche Börse Group which follows directly after the. DAX International 100 index. Both of these indices are comprised of the most liquid issues, both German and international, in the Prime Standard, General Standard and Entry Standard segments of the Frankfurt Stock Exchange. Inclusion of listed companies in each index is determined by trading liquidity and without regard to their country of domicile.

Key information about shares in Nanostart AG



TYPE OF SHARE

Shares without par value (*Stückaktien*)

TOTAL NUMBER OF SHARES

5,940,000 (following capital increase of March 2010, through which 330,000 new shares were issued)

REGISTERED CAPITAL (*GRUNDKAPITAL*)

EUR 5,940,000

CURRENCY

Euro

CLOSING PRICE AT FISCAL YEAR END (DEC. 31, 2009)

EUR 16.55

52-WEEK HIGH / 52-WEEK LOW

EUR 20.60 / EUR 6.15

CURRENT PRICE (AS OF APRIL 30, 2010)

EUR 22.68

MARKET CAPITALIZATION (AS OF APRIL 30, 2010)

EUR 135 million

YEAR OF INITIAL LISTING

2005

TRADING VENUES

Shares in Nanostart AG are traded on the floor of the Frankfurt Stock Exchange as well as on XETRA, the electronic trading system of Deutsche Börse AG

EXCHANGE SEGMENT

Entry Standard (Frankfurt Stock Exchange)

ACCOUNTING STANDARD

German statutory accounting ("*HGB*")

FISCAL YEAR END

December 31

DESIGNATED SPONSORS

BHF Bank AG, Close Brothers Seydler AG

ORDER BOOK BROKER (*SKONTROFÜHRER*)

Baader Wertpapierhandelsbank AG

LISTING PARTNER

Steubing AG

Management report for the fiscal year

1. GENERAL

As a venture capital provider, Nanostart AG's investment activities aim to achieve a long-term increase in the net asset value per share. To this end, the Company's strategy is to acquire companies with attractive added-value potential and calculable risks. The companies targeted operate in the nanotechnology segment and include material manufacturers, suppliers and users. Investments are not restricted to any particular region, but have a global focus. In addition, equity investments are acquired in different stages and include start-up companies through to companies undergoing global expansion.

2. SITUATION OF THE COMPANY AND DEVELOPMENT OF ITS BUSINESS

2.1 Overall economic environment

Nanostart AG's equity investments, which comprise US, German and Singaporean nanotechnology companies, stem from a variety of industries. Consequently, the overall economic development in 2009 affected the business of these individual companies in different ways.

Global economic development in 2009 was shaped by the general difficulties associated with the economic crisis, which hit industrial nations particularly hard. Figures issued by the World Bank, for example, show that global production fell by 2.2%. Some sectors such as mechanical engineering or the automotive industry were particularly affected, while the impact on other less cyclical sectors such as medical technology was not as severe.

2.2 Capital market environment

The trend on the stock markets in the first half of 2009 was heavily influenced by the financial and economic crisis. The first quarter of 2009 saw the German DAX index sink to its year low, although it managed to recover significantly in the second half of the year. Overall, the DAX climbed by some 24% over the course of 2009, from 4,810 points at the beginning of the year to 5,980 points at year-end.

The development of the various sectors proved varied. Financial stocks were heavily impacted by the financial crisis, while at the beginning of the year in particular stocks in the small and mid-cap segment suffered heavily from investor restraint.

2.3 Market for venture capital equity investments

In line with the general economic situation, investing activities on the venture capital market were also extremely reserved. As a result, investments in the German venture capital segment only totaled some EUR 1.6 billion (prior year:

EUR 6.5 billion) in 1,177 companies (prior year: 1,230 companies). This decline highlights the risk aversion of private investors during this time of financial and economic crisis.

2.4 Nanostart AG's development in the fiscal year

In 2009, Nanostart AG concluded a new investment agreement via Nanostart Singapore Early-Stage Venture Fund I Pte Ltd, which is managed by the Company's wholly owned subsidiary Nanostart Asia Pte Ltd, Singapore. This agreement concerns Biomers Pte Ltd, Singapore, a company manufacturing innovative polymers using nanomaterials. The applications for this technology are mainly aimed at the area of orthodontics. Nanostart AG currently holds an approximate 17% stake in this company via Nanostart Singapore Early Stage Venture Fund I Pte Ltd.

MagForce Nanotechnologies AG, Berlin, in which Nanostart AG holds an investment of approximately 73%, is continuing to develop successfully and to plan. The company concluded its clinical study on glioblastoma patients towards the end of 2009 and applied for approval, meaning that the management of MagForce expects the therapy to receive market approval in the first half of 2010. MagForce's share price, based on the book value of the equity investment, continues to perform very well and stood at EUR 42.00 as of March 16, 2010. As a result, this item alone contains hidden reserves of around EUR 115 million.

ItN Nanovation AG, Saarbrücken, also performed well in the fiscal year thanks to the implementation of a thorough restructuring program. In addition to appointing a new chairman of the executive board, other restructuring measures involved reducing costs significantly by rigorously cutting headcount. Other measures such as capital increases helped the company to increase its liquidity. The core areas, such as CFM flat filter systems, received significant new orders, which resulted in share prices rising considerably from EUR 0.80 at the beginning of the year to EUR 5.52 as of March 16, 2010, thus far exceeding the book value of Nanostart's equity investment. Due to the outstanding business potential of ItN Nanovation AG's products, above all in the water filtration segment, Nanostart AG is highly optimistic that its equity investment in this company will be successful.

Operating activities in Singapore were established and expanded over the course of the fiscal year. In April 2009, Nanostart Singapore Early Stage Venture Fund I Pte Ltd closed its first financing round. Nanostart and the Singaporean government are each investing SGD 10 million (approximately EUR 5 million) in promising nanotechnology companies in the city state via this fund. In the fiscal year, the fund was used for follow-on financing for Curiox Biosystems Pte Ltd as well as a new investment in Biomers Pte Ltd, with the fund now holding around 19% and 17% in these companies, respectively.

▸

The Singaporean government's equity investment in this fund may be repurchased by Nanostart AG within the first five years after closure of the first financing round at a rate of return of 5% p.a.

3. PRESENTATION OF NET ASSETS, FINANCIAL POSITION AND RESULTS OF OPERATIONS

3.1 Net assets

Total assets increased by some EUR 4.0 million in the fiscal year. On the asset side, is largely attributable to additions to financial assets, relating in particular to additional financing measures for existing equity investments. On the liabilities sides, equity increased by some EUR 3.2 million and liabilities to affiliates by approximately EUR 4.6 million. By contrast, liabilities to banks fell by around EUR 2.0 million.

3.2 Financial position

Cash inflows in the fiscal year were primarily attributable to the sale of shares in affiliates and equity investments as well as loans from affiliates. Cash outflows relate in particular to the acquisition of new and additions to existing equity investments as well as the financing of our business activities.

3.3 Results of operations

In the fiscal year, the majority of Nanostart AG's income was generated by selling shares in affiliates and equity investments.

For the most part, expenses relate to other operating expenses (approx. EUR 1.0 million) and personnel expenses (approx. EUR 1.0 million). Other operating expenses include a write-down of the book value of the equity investment in Nanodynamics amounting to approximately EUR 1.3 million.

Overall, Nanostart AG reported net income of some EUR 1.2 million for fiscal year 2009 (prior year: approximately EUR 2.1 million).

4. RISKS AND OPPORTUNITIES RELATING TO FUTURE DEVELOPMENT

Nanostart AG's success is largely dependent on the development of the market for venture capital in the nanotechnology segment. There is a risk that increasing competition for financing interesting projects will push up the prices of equity investments and reduce the chance of achieving returns. What is more, a number of established venture capital providers have a broader equity base and more extensive personnel, technical and other resources.

Consequently, competitors may be in a position to react more swiftly to changing market conditions. It cannot be ruled out that new competitors will emerge and alliances formed, thus making them attractive to borrowers. This bears the risk that access to attractive projects may be impeded, which could have a negative effect on the Company's net assets, financial position and results of operations.

Among other things, Nanostart AG's future results of operations depend on the acquisition of new, innovative companies with strong growth prospects. There is no guarantee that such companies will always be looking to raise capital on the market or that Nanostart AG will always have access to such companies. Despite careful selection, it cannot be ruled out that Nanostart AG's equity investments entail an above-average risk and the development of the Company's equity investments will not be in line with expectations. This can exert considerable influence on these equity investments' earnings power and returns, and thus on Nanostart AG.

The nature of providing venture capital means that income is irregular. More often than not, the Company only realizes income when an equity investment is sold. The sale of an equity investment and the accompanying realization of a profit/loss depend on a number of external factors over which the Company has no influence. The Company strives to time its transactions so as to obtain the best possible price, which may lead to discontinuity in the transactions. The Company may also require financing if equity investments cannot be sold at a profit.

All of these developments and Nanostart AG's ability to raise additional capital are extremely dependent on the situation on the capital market and the economy as a whole. The situation has been strained during the financial crisis and the general economic slowdown, which began in 2008. If the situation continues, this could heighten the risks outlined above.

Measured in terms of book values, the equity investments in ItN Nanovation AG and MagForce Nanotechnologies AG currently account for a substantial portion of Nanostart AG's fixed assets. Consequently, negative developments at both of these companies could have a significant effect on the Company's financial position, net assets and results of operations.

To minimize the aforementioned risks, Nanostart AG is implementing a range of measures. These include, for example, continuous analysis of the nanotechnology market, monitoring the competition on an ongoing basis, permanent investment controlling and constant dialog with the management

▸

teams of the equity investments. This combination of measures helps to minimize Nanostart AG's specific risks.

The Company's opportunities lie in particular in using its market position to continue to systematically expand the investment portfolio, thus further consolidating its position as the leading nanotechnology investment company. In addition, the Company's large stake in MagForce Nanotechnologies AG greatly increases its potential to benefit from the development of this portfolio company.

5. DISCLOSURES ON FINANCIAL INSTRUMENTS PURSUANT TO SEC. 289 (2) OF THE GERMAN COMMERCIAL CODE (*HANDELSGESETZBUCH*, HGB)

As regards its financial instruments, which mostly related to cash and cash equivalents, receivables and other assets as well as liabilities in fiscal year 2009, the Company is exposed in particular to the following risks:

The default risk from financial assets comprises the danger that a contractual partner may default and is therefore limited by the positive fair values of the receivables from the respective counterparty. No valuation allowances were required as of the balance sheet date.

6. CLOSING STATEMENT ON THE DEPENDENT COMPANY REPORT

In accordance with Sec. 312 of the German Stock Corporation Act (Aktiengesetz), the executive board prepared a report on relationships with affiliates for the reporting period which was reviewed by our auditors. The dependent company report ended with the following declaration:

"Our Company received appropriate consideration for the legal transactions and measures explained in the report and, as a result, was not disadvantaged by any measures implemented or not implemented. This assessment is based on the circumstances known to the executive board at the time of the transactions subject to mandatory reporting."

7. OUTLOOK FOR 2010 – ANTICIPATED DEVELOPMENT

The radical change affecting nanotechnology in laboratories through to applications for nanotechnology-based products will continue in 2010, accompanied by rapid growth in the economic significance of nanotechnology. By contrast, the overall economic environment and the situation on the capital markets pose challenges for companies in the venture

capital segment, meaning it continues to be difficult to acquire new customers, business partners or investors in the present climate. This makes it difficult for the Company to accurately plan the development of its business and affects how planned business activities are implemented.

Nanostart has gained significance as an important financial investor over the last few extremely successful fiscal years and currently holds a very promising investment portfolio. On this basis, Nanostart AG believes that it is well equipped to continue to benefit from the growth trend of nanotechnology and to close forthcoming fiscal years with good results.

8. SIGNIFICANT EVENTS SINCE THE CLOSE OF THE FISCAL YEAR

None.

Frankfurt, Germany, March 17, 2010

Marco Beckmann
Chief executive officer and
sole member of executive board

Balance sheet as of December 31, 2009

Assets

		Dec. 31, 2009 EUR	Dec. 31, 2008 EUR k
A	**Fixed assets**		
I	Intangible assets		
	Franchises, industrial and similar rights and assets, and licenses in such rights and assets	**9.00**	**1**
II	Property, plant and equipment		
1	Other equipment, furniture and fixtures	117,960.00	157
		117,960.00	**157**
III	Financial assets		
1	Shares in affiliates	6,624,439.99	6,456
2	Loans to affiliates	13,328,880.13	5,268
3	Equity investments	13,583,086.03	14,084
		33,536,406.15	**25,808**
		33,654,375.15	**25,966**
B	**Current assets**		
I	Receivables and other assets		
1	Trade receivables	1,194.27	1
2	Receivables from affiliates	31,037.97	3,085
3	Receivables from other investees and investors	1,401,244.41	0
4	Other assets	7,792.06	41
		1,441,268.71	**3,127**
II	Cash on hand, Bundesbank balances, bank balances and checks	**154,574.22**	**2,118**
		1,595,842.93	**5,245**
C	**Prepaid expenses**	**23,547.08**	**26**
Total assets		**35,273,765.16**	**31,237**

Equity and liabilities

		Dec. 31, 2009 EUR	*Dec. 31, 2008 EUR k*
A	**Equity**		
I	Subscribed capital	5,610,000.00	5,250
	Conditional capital I: EUR 2,244,000 Conditional capital II: EUR 561,000		
II	Capital reserves	11,566,800.00	9,900
III	Revenue reserves	6,688,637.30	4,615
IV	Net retained profit	1,189,114.54	2,074
		25,054,551.84	**21,839**
B	**Contributions made to effect the resolved capital increase**	**0.00**	**2,027**
C	**Provisions**		
1	Tax provisions	163,000.00	0
2	Other provisions	207,756.00	184
		370,756.00	**184**
D	**Liabilities**		
1	Liabilities to banks	4,413,966.25	6,413
2	Trade payables	44,197.03	62
3	Liabilities to affiliates	5,303,211.20	655
4	Other liabilities	87,082.84	57
	thereof for taxes: EUR 72,309.27 (prior year: EUR 46k) thereof for social security: EUR 619.54 (prior year: EUR 2k)		
		9,848,457.32	**7,187**
Total liabilities and equity		**35,273,765.16**	**31,237**

Statement of changes in fixed assets

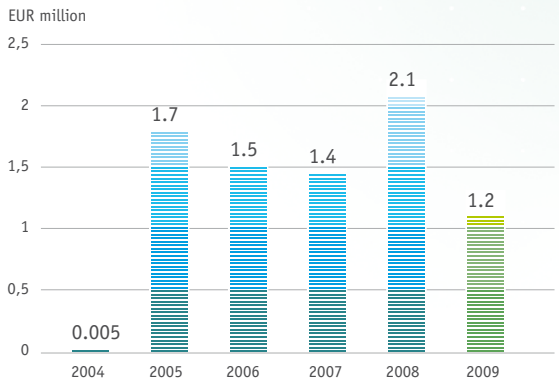
		Acquisition/production cost			
		Jan. 1, 2009 *EUR*	*Additions* *EUR*	*Disposals* *EUR*	*Dec. 31, 2009* *EUR*
I,	**Intangible assets**				
	Franchises, industrial and similar rights and assets, and licenses in such rights and assets	17,318.01	0.00	0.00	17,318.01
II,	**Property, plant and equipment**				
	Other equipment, furniture and fixtures	251,281.03	266.37	13,606.17	237,941.23
III,	**Financial assets**				
1,	Shares in affiliates	6,456,232.17	394,299.82	226,092.00	6,624,439.99
2,	Loans to affiliates	5,267,920.00	8,060,960.13	0.00	13,328,880.13
3,	Equity investments	15,312,943.97	1,094,124.00	165,000.00	16,242,067.97
		27,037,096.14	**9,549,383.95**	**391,092.00**	**36,195,388.09**
		27,305,695.18	**9,549,650.32**	**404,698.17**	**36,450,647.33**

	Amortization, depreciation and write-downs				*Net book value*	
Jan. 1, 2009	*Additions*	*Disposals*	*Dec. 31, 2009*	*Dec. 31, 2009*	*Dec. 31, 2008*
EUR	*EUR*	*EUR*	*EUR*	*EUR*	*EUR*
16,833.01	476.00	0.00	17,309.01	9.00	485.00
94,532.03	27,724.51	2,275.31	119,981.23	117,960.00	156,749.00
0.00	0.00	0.00	0.00	6,624,439.99	6,456,232.17
0.00	0.00	0.00	0.00	13,328,880.13	5,267,920.00
1,228,741.79	1,430,240.15	0.00	2,658,981.94	13,583,086.03	14,084,202.18
1,228,741.79	**1,430,240.15**	**0.00**	**2,658,981.94**	**33,536,406.15**	**25,808,354.35**
1,340,106.83	**1,458,440.66**	**2,275.31**	**2,796,272.18**	**33,654,375.15**	**25,965,588.35**

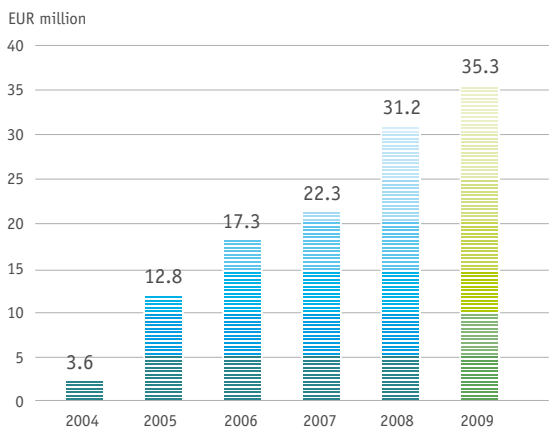
Income statement for 2009

		2009 EUR	2008 EUR k
1	Revenue	8,747.66	56
2	Other operating income	4,681,627.14	5,961
		4,690,374.80	**6,017**
3	Cost of materials Cost of purchased services	59,940.56	125
4	Personnel expenses		
a	Wages and salaries	1,010,391.83	976
b	Social security, pension and other benefit costs	98,875.14	108
5	Amortization, depreciation and write-downs of intangible assets and property, plant and equipment	28,200.51	33
6	Other operating expenses	997,746.75	1,932
		2,195,154.79	**3,174**
7	Other interest and similar income thereof from affiliates: EUR 831,289.70 (prior year: EUR 484k)	860,746.06	486
8	Write-downs of financial assets	1,430,240.15	760
9	Interest and similar expenses thereof to affiliates: EUR 292,522.03 (prior year: EUR 13k)	573,611.93	494
		-1,143,106.02	**-768**
10	Result from ordinary activities	1,352,113.99	2,075
11	Income taxes	162,999.45	0
12	Other taxes	0.00	1
		162,999.45	**1**
13	Net income for the year	1,189,114.54	2,074
14	Profit carryforward	2,073,956.02	1,429
15	Allocation to revenue reserves	-2,073,956.02	-1,429
16	Net retained profit	**1,189,114.54**	**2,074**

Net retained profit 2004 - 2009



Total assets 2004 - 2009



Notes to the financial statements for fiscal year 2009

GENERAL

These financial statements, presented here in translation from the German original, have been prepared in accordance with the provisions of the German Commercial Code (*Handelsgesetz*, HGB) and the German Stock Corporation Act (*Aktiengesetz*, AktG).

The Company is a small corporation as defined by Sec. 267 HGB. The Company made partial use of the size-related simplification options for small corporations.

The income statement has been prepared using the cost-summary method.

ACCOUNTING AND VALUATION METHODS

Acquired intangible assets are recognized at acquisition cost and amortized over their expected useful lives.

Property, plant and equipment are recognized at acquisition or production cost and, if they have a limited life, are depreciated using the straight-line method over a period of between three to 13 years.

Low-value assets with a value not exceeding EUR 150.00 are fully expensed in the year of acquisition. Additions with an acquisition cost of between EUR 150.00 and EUR 1,000.00 are recognized in a collective item and released in equal amounts over a period of five years.

Low-value assets with a value not exceeding EUR 150.00 are fully expensed in the year of acquisition. Additions with an acquisition cost of between EUR 150.00 and EUR 1,000.00 are recognized in a collective item and released in equal amounts over a period of five years.

Cash on hand and bank balances are stated at nominal value. Cash and bank balances in foreign currencies are recognized at the lower of the historical or closing rates.

Other provisions take all risks into account which are identifiable based on prudent business judgment. Liabilities are recognized at the amount repayable.

Notes and explanations to the balance sheet items

FIXED ASSETS

The development of fixed assets is presented in the statement of changes in fixed assets. Impairment losses of EUR 1,430k were charged during the fiscal year.

INFORMATION ON SHAREHOLDINGS

	Share in capital %	*Equity EUR k*	*Net income/ net loss EUR k*	*Year*
MagForce Nanotechnologies AG, Berlin, Germany	73.4 *	- 4,197	- 5,465	2008
ItN Nanovation AG, Saarbrücken, Germany	23.9 **	4,732	- 11,541	2008
VentureTech Equity-Partners GmbH, Frankfurt, Germany	100.0	982	- 110	2008
Holmenkol AG, Ditzingen, Germany	50.0 ***	5,798	- 711	2008/2009
Nanostart Asia Pte.Ltd., Singapore	100.0 ****	- 129	- 129	2008
Namos GmbH, Dresden, Germany	26.0	- 136	- 693	2008

* *of which 0.2% held indirectly via VentureTech Equity Partners GmbH*

** *of which 5.8% held indirectly via VentureTech Equity Partners GmbH*

*** *minus 1 share*

**** *The company was established in April 2008 with equity of SGD 1.*

Loans to affiliates comprise loans to VentureTech Equity-Partners GmbH of EUR 2,557k and loans to MagForce Nanotechnologies AG of EUR 10,772k.

Loans to VentureTech Equity-Partners GmbH as well as interest on the loans to MagForce Nanotechnologies AG of EUR 1,304k were disclosed under receivables from affiliates in the prior year and reclassified in the fiscal year.

MagForce Nanotechnologies AG was issued a letter of subordination totaling EUR 9,468k for loans granted by Nanostart AG.

FIXED ASSETS

Receivables and other assets
Receivables and other assets are due in up to one year.

Equity
As of the balance sheet date, the Company's capital stock entered in the commercial register amounted to EUR 5,610,000.00.

Nanostart AG's capital stock is thus divided into 5,610,000 no-par-value bearer shares. In accordance with a resolution by the executive board and supervisory board from December 4, 2008, the Company's capital stock was increased by EUR 360,000.00 from EUR 5,250,000.00 by issuing 360,000 new no-par-value bearer shares with a nominal value of EUR 360,000.00. The capital increase was entered in the commercial register on January 26, 2009.

In accordance with the resolution approved at the shareholder meeting on July 5, 2007, the executive board is authorized to increase the Company's capital stock on one or several occasions by July 4, 2012, by a total of up to EUR 2,625,000 by issuing new no-par-value bearer shares in return for cash or non-cash contributions (authorized capital 2007/I). As of December 31, 2009, the Company still had unutilized authorized capital of EUR 2,265,000.

The Company's capital stock was conditionally increased by up to EUR 2,244,000.00 by issuing 2,244,000 no-par-value bearer shares (conditional capital 2009/I). The purpose of the conditional capital increase is to grant conversion or option rights to the holders of convertible and warrant bonds which are issued by the Company due to the authorization granted to the executive board until July 31, 2014, by the shareholder meeting on August 19, 2009. The Company's capital stock was conditionally increased by up to EUR 561,000.00 by issuing 561,000 no-par-value bearer shares (conditional capital 2009/II). The purpose of the conditional capital increase is to secure subscription rights for stock options which are issued under the 2009 stock option plan due to the authorization granted by the shareholder meeting on August 19, 2009.

In accordance with a resolution approved at the shareholder meeting, the prior-year net retained profit of EUR 2,073,956.02 was transferred in full to the revenue reserves. Revenue reserves thus developed as follows:

	EUR
As of December 31, 2008	4,614,681.28
Transfer as resolved by the shareholder meeting	2,073,956.02
As of December 31, 2009	**6,688,637.30**

PROVISIONS

Other provisions primarily relate to accrued vacation, audit fees, supervisory board remuneration and outstanding invoices.

LIABILITIES

	Dec. 31, 2009		*Dec. 31, 2008*	
	Total EUR k	*Due in up to one year EUR k*	*Gesamt EUR k*	*Due in up to one year EUR k*
Liabilities				
to banks	4,414	4,414	6,413	6,413
Trade payables	44	44	62	62
to affiliates	5,303	5,303	655	655
Other liabilities				
thereof for taxes: EUR 72k (prior year: EUR 46k) thereof for social security: EUR 1k (prior year: EUR 2k)	87	87	57	57
	9,848	**9,848**	**7,187**	**7,187**

OTHER FINANCIAL OBLIGATIONS

	EUR k	*Maturity*
Obligations		
from rental agreements	82	2010
from loan agreements	1,957	2010

In addition, the Company has obligations from indefinite rental agreements of EUR 9k p.a.

Notes and explanations to the income statement items

OTHER OPERATING INCOME

Other operating income mainly comprises gains from financial assets.

OTHER OPERATING EXPENSES

For the most part, other operating expenses relate to advertising and travel expenses, premises expenses and legal and consulting fees.

OTHER NOTES

Corporate bodies

The chief executive officer and sole member of the executive board (*Vorstand*) in the fiscal year was:
_ **Mr. Marco Beckmann**

The members of the supervisory board (*Aufsichtsrat*) in fiscal year 2009 were:
_ **Dr. Alfred Krammer**,
Munich, Germany (chairman)
_ **Professor Wolfgang M. Heckl,**
Munich, Germany (deputy chairman)
_ **Mr. Achim Lindner,**
Kulmbach, Germany

PROPOSAL FOR THE APPROPRIATION OF PROFITS

The executive board proposes to transfer the net retained profit of EUR 1,189,114.54 in full to the revenue reserves.

Frankfurt, Germany, March 11, 2010

Marco Beckmann
Chief executive officer and
sole member of executive board

Audit opinion

We have issued the following audit opinion with regard to the financial statements and management report:

„To Nanostart AG

We have audited the annual financial statements, comprising the balance sheet, the income statement and the notes to the financial statements, together with the bookkeeping system, and the management report of Nanostart AG, Frankfurt, Germany, for the fiscal year from January 1, 2009 to December 31, 2009. The maintenance of the books and records and the preparation of the annual financial statements and management report in accordance with German commercial law are the responsibility of the Company's management. Our responsibility is to express an opinion on the annual financial statements, together with the bookkeeping system, and the management report based on our audit.

We conducted our audit of the annual financial statements in accordance with Sec. 317 of the German Commercial Code (Handelsgesetzbuch, HGB) and German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer, IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with [German] principles of proper accounting and in the management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Company and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and records, the annual financial statements and the management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the annual financial statements and management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the annual financial statements comply with the legal requirements and give a true and fair view of the net assets, financial position and results of operations of the Company in accordance with [German] principles of proper accounting. The management report is consistent with the annual financial statements and as a whole provides a suitable view of the Company's position and suitably presents the opportunities and risks relating to future development."

Mannheim, Germany, April 15, 2010

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Matner	Kerber
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

CONTACT INFORMATION

Published by
Nanostart AG
Goethestrasse 26 – 28
60313 Frankfurt
Germany
www.nanostart.de

Concept/design designhouse