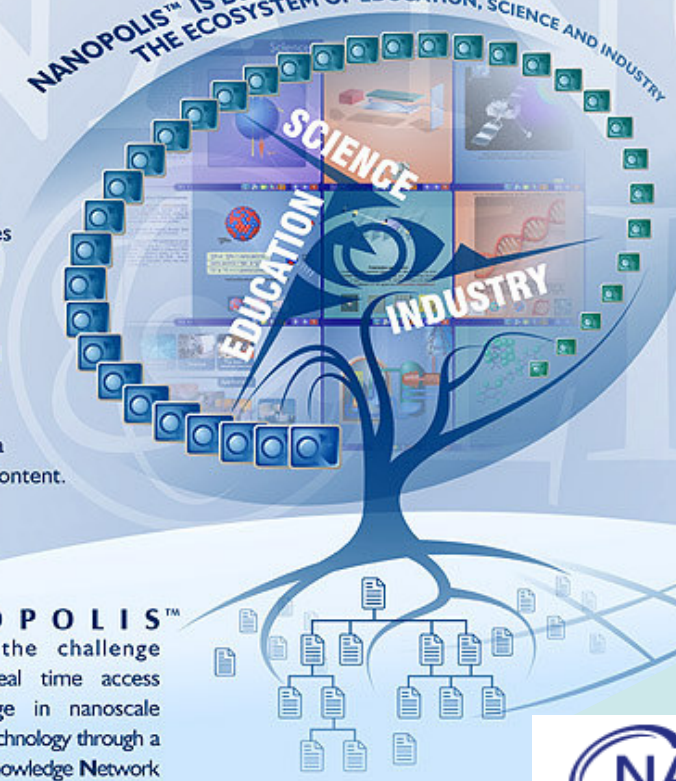
NANOPOLIS™

EXPLORING MATTER AT THE ATOMIC SCALE

www.nanopolis.net



The science of laboratories from all over the world is now concentrated in thousands of screens of multimedia educational content.

NANOPOLIS™ addresses the challenge of having real time access to knowledge in nanoscale science and technology through a **D**istributed **K**nowledge **N**etwork

NANOPOLIS™
WORLD OF KNOWLEDGE

ESRF · Institut Laue-Langevin · LANSCE · Advanced Photon Source · SOLEIL SYNCHROTRON · ISIS

GKSS · Laboratoire Léon Brillouin · Forschungszentrum Jülich

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Nanopolis™ – Product Presentation Sheet

Overview

Nanopolis™ http://www.nanopolis.net creates a global view about nanotechnology and explains the concepts by interactive multimedia, while keeping representations up-to-date, thus being a real time mirroring system of bio-nano within the research, education and industry interactions.

The majority of concepts, starting from the scientific basis and ending with nano applications in day-to-day activities, are covered. The materials are created and kept up-to-date by the Nanopolis™ Scientific Analysis Team under the guidance of around 300 researchers and professors involved in this field (see more at www.nanopolis.net/partners).

The Nanopolis™ encyclopedic series comprises 3 publications: "**Exploring Nanotechnology**", "**Exploring Matter with Neutrons**" (on CD-ROM support - USB key protected and downloadable version) and "**Exploring Matter with Synchrotron Light**" (only on CD-ROM format). It's worth pointing out that the Ministry of Education of France recognized the pedagogical value of "Exploring Matter with Synchrotron Light" and awarded with the IAMS prize for multimedia in science. Another title is currently under development "Exploring Bio-Nanotechnology".

Apart from 3000 multimedia and animations explaining scientific and technical principles, real-live examples of nanotechnology applications are presented:
~ 30 Neutronics and Synchrotron Facilities worldwide,
~ 30 companies active in the field of matter exploration at atomic scale,
~ 50 diagrams illustrate the potential market impact of nanotechnology by analyzing the implication chains from nano research to nano applications,
~ 2500 players in the field are presented and categorized by their area of expertise.

Products – The Nanopolis™ educational series

For product descriptions please visit:

- http://nanotech.nanopolis.net – "Exploring Nanotechnology" multimedia encyclopedia – first edition (2005)
- http://neutrons.nanopolis.net – "Exploring Matter with Neutrons" multimedia encyclopedia – second edition (2005)
- http://synchrotron.nanopolis.net – "Exploring Matter with Synchrotron Light" multimedia encyclopedia – second edition (2002)
- www.nanopolis.net – "Exploring Bio-Nanotechnology" (to be released in 2007-2008)

The encyclopedias are addressed to a wide audience including but not limited to: students, teachers, professors and researchers, professionals with engineering background and decision makers.
For detailed descriptions please refer to the end of this document.

Pricing policy

When ordering (from the Nanopolis™ order page) more items of the same product version and type, the retail unit price is subject to the following volume discount scheme:

- 2 to 10 items 10 % discount
- 11 to 50 items 20 % discount
- 51 to 100 items 30 % discount
- More than 101 items 40 % discount
- The Nanopolis™ Trilogy (consisting of "Exploring Matter with Synchrotron Light", "Exploring Matter with Neutrons" and "Exploring Nanotechnology") is also considered a product (item) and its unit price for a single unit is 30% less than the sum of the comprising encyclopedias. For more trilogies bought the above scheme applies.

As a reseller you benefit of significant discounts (in addition to the volume discount scheme above). For details and special agreements (including exclusivity) – please contact us by filling in the contact form at: http://www.nanopolis.net/contact

Support, Shipping, Returns and Refund

Nanopolis™ offers professional technical support for all clients; please feel free to contact us at anytime using the contact form in our website.

In case of defects, you have the option to return the product in maximum 8 days after receiving it and obtain a full refund or a new copy.

In case of difficulties at installation or software incompatibility please refer to the Nanopolis™ Technical Support Team which will guide you throughout the installation process. In case this procedure fails you may send back the product for an internal investigation. Following analysis from the support team you will receive a properly operating product.

The transportation fee for the returned items is supported by the client and the shipping charges of the new copy of the product (if it is the case) will remain in Nanopolis™, responsibility.

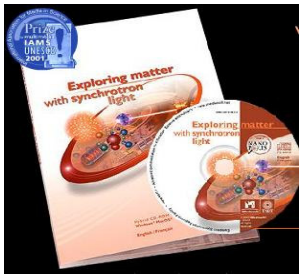
In case products arrive incomplete – when ordering the CD-ROM format of "Exploring Matter with Neutrons" you should receive a blue USB key and a green USB key for "Exploring Nanotechnology". In case the USB key or the CD-ROM are missing, you must notify it as soon as the package is delivered.

In case of difficulties Nanopolis disregards claims of software installation malfunctioning sent later than 8 days after receiving the DHL parcel.

Location

Nanopolis™ is part of the iMediasoft Group – www.imediasoft.com with headquarters in Bucharest, Romania.

EXPLORING MATTER WITH SYNCHROTRON LIGHT - 2nd EDITION
multimedia encyclopedia
CD-ROM



©2002 600 multimedia pages
ISBN 2-9518166-0-X
Multimedia CD-ROM
Price: 45€ educational version/90€ business version; PC/MAC
Audience: Students, Teachers, Professionals
Publisher: Nanopolis™

Buy online with a credit card or by swift:
http://www.nanopolis.net/order

DESCRIPTION:

Conceived for a worldwide audience of students, scientists and industrialists, the CD-ROM **Exploring Matter with Synchrotron Light** invites you to participate in a virtual tour of a synchrotron, it explains how a synchrotron works and details the innumerable applications.

Widely used in the most advanced fields of research in physics, chemistry, biology, medicine and materials science, synchrotron light has participated in many of the greatest scientific discoveries of our times such as molecular biology and nanotechnology.

Even though this research instrument is now indispensable to researchers, it still remains an enigma to the general public.

The encyclopedia provides a comprehensive learning tool for high schools, universities, scientific information for the general public and communication tool for research and industry.

Its interactivity and multiple-entry points permit each and every visitor to explore the CD-ROM according to their own knowledge and curiosity.

Numerous animated images give the visitor the opportunity to vary specific parameters and to follow the results. In this way the visitor becomes involved in a virtual experiment.

CONTENTS:

Selected topics:

- *INTERACTION BETWEEN LIGHT AND MATTER* (Nature of Light. Properties of Light. X-Rays. Synchrotron Light. Atoms. Interatomic Bonds. Order and Disorder. Properties of Matter.)

- *TECHNOLOGY OF LIGHT SOURCES* (Physical Basis. Injection. Storage Rings. Optics. Sample. Detectors. Data Acquisition.)

- *EXPERIMENTAL METHODS FOR STUDYING MATTER* (X-ray Imaging. X-Ray Absorption Spectroscopy. X-ray Scattering. X-Ray Diffraction.)

- *SCIENTIFIC APPLICATIONS* (Surfaces. Magnetism. Extreme Conditions. Materials. Biology. Medicine. Chemistry. Environment.)

- *SYNCHROTRON FACILITY PRESENTATIONS*.

CHARACTERISTIC OF THE CONTENT:

- 600 multimedia pages
- 10 min of video
- 200 2D and 3D images

Size on disk: 657 MB

PC/MAC compatible

Bilingual English/French

OPERATING SYSTEM REQUIREMENTS:

- 32 MB RAM (16 MB free RAM memory available, 64 MB RAM recommended);
CD-ROM drive;
- PC with Pentium processor 200 MHZ or compatible (MMX recommended);
Microsoft Windows 95, 98, 2000, NT 4.0;
- SVGA graphics adapter; audio device recommended;
- QuickTime V.4.1.2 or higher; or Macintosh Power PC G3; Apple MacOS 7.6 or later;
- Monitor set-up: 640x480 pixel, high color (16 bit) color depth;
- CD-ROM format: Mac/PC (ISO 9660-Joliet) hybrid CD-ROM. This hybrid CD-ROM (IBM PC or compatible or Mac PowerPC) runs completely from the CD-ROM;
- No installation is required.

PRICES:

For institutions & industry

- PC & MAC: 90 €

For colleges and universities *(Without the Facilities module)*

- PC & MAC: 45 €

See prices in USD:
http://www.nanopolis.net/order/prices_usd.php

AUDIENCE:

Scientists, researchers, professors, university students, high-school students, industrialists, professionals with engineering background.

LIST OF CONTRIBUTORS:

The quality of the information comprised in the encyclopedia has been proven and validated by high class figures. For more details and extended list of collaborators visit
http://www.nanopolis.net/partners.php

EXPLORING MATTER WITH NEUTRONS – 2nd EDITION multimedia encyclopedia CD-ROM

©2005 1500 multimedia pages
ISBN 2-9518166-2-6
Multimedia CD-ROM
Price: 125€/150€/250€/300€; PC/MAC
Audience: Students, Teachers, Professionals
Publisher: Nanopolis™

Buy online with a credit card or by swift:
http://www.nanopolis.net/order

DESCRIPTION:

Exploring Matter with Neutrons - 2nd edition, 2nd volume of the NANOPOLIS™ encyclopedia series is the first multimedia encyclopedia devoted to neutron science and technologies.

It explains neutrons and the unique properties that make them so useful to science and industry. The experimental instruments and the large array of neutron applications in the most advanced fields of physics, chemistry, biology, and materials science are described in an interactive manner.

The encyclopedia is destined for students, teachers, research institutes, industry and the general public interested in these topics. The multiple-entry points permit each and every visitor to explore the CD-ROM according to their

own knowledge and curiosity. Both 2D and 3D animations, and virtual reconstruction with computer-generated images are used to guide visitors through this scientific and technical world, helping to make it both understandable and exciting.

CONTENT:

Selected Topics:

- *NEUTRONS AND STATES OF MATTER* (Structure of matter, Dynamics of matter, Phase transitions)
- *SOURCES* (Transportable sources, Natural sources, Sources of the future)
- *TOOLS FOR NEUTRON SCIENCE* (For the study of matter, For fundamental physics, Sample environment, Neutron optics, Neutron detection)
- *APPLICATION-FUNDAMENTAL RESEARCH* (Fundamental physics, Structural biology, Chemistry of the solid state, Magnetism, Soft matter)
- *APPLICATION-APPLIED RESEARCH* (Metallurgy and materials, Medicine, Metrology, Soft matter, Chemistry, Earth, planets, meteorites)
- *APPLICATION INDUSTRY AND MEDICINE* (Civil and military nuclear energy, Imaging and quality control, Technological irradiations, Non-destructive chemical analysis, Neutrons and medicine, Metallurgy and materials)
- *FACILITIES*

CHARACTERISTICS OF THE CONTENT:

- Multimedia pages: 1245 (per version)
- Images number: 1272
- Animation number: 933
- Video number: 128

Size on disk: 631 MB

***PC/MAC* compatible**

Bilingual English/French

OPERATING SYSTEM REQUIREMENTS:

- 28 MB RAM memory available required (256 MB RAM recommended)
- CD-ROM drive
- Available USB port
- PC with Pentium processor 500 MHZ or compatible
- Microsoft Windows XP, 2000, NT or Mac OS X 10.3.9 and higher
- SVGA graphics adapter; Quicktime V 4.1.2 or later
- CD-ROM format: MAC/PC CD-ROM (ISO 9660-Joliet).

This CD-ROM (IBM PC or compatible or Mac PowerPC) requires the installation of the appropriate drivers.

PRICES:

For the educational version:

- PC: 125€
- MAC: 125€
- PC & MAC: 150€

For the business version:

- PC: 250€
- MAC: 250€
- PC&MAC: 300€

See prices in USD: http://www.nanopolis.net/order/prices_usd.php

AUDIENCE:

Scientists, researchers, professors, university students, high-school students, industrialists, decisions-makers, professionals with engineering background.

LIST OF CONTRIBUTORS:

Exploring matter with Neutrons is the accomplishment of more than 150 contributors from

the world-wide neutron community who have invested time and energy to give you the most comprehensive multimedia guide to neutron science and technology ever. For an extended list of contributors visit http://neutrons.nanopolis.net/coauthors.html

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EXPLORING NANOTECHNOLOGY
multimedia encyclopedia
CD-ROM

©2005 800 multimedia pages
ISBN: 2-9518166-3-4
Multimedia CD-ROM
Price: 175€/215€/350€/430€; PC/MAC
Audience: Students, Teachers, Professionals
Publisher: Nanopolis™

Buy online with a credit card or by swift:
http://www.nanopolis.net/order

DESCRIPTION:

Exploring Nanotechnology, 3rd volume of the Nanopolis™ encyclopedia series, was conceived to provide an understanding of nanotechnology and its implications.
It contains:

- Intuitive explanations of nanotechnology concepts, technological processes and applications
- Summary charts showing research groups and companies involved in each nanotechnology subfield
- References necessary for further insight on each topic

CONTENT:

Selected topics:

- *NANOSTRUCTURES* (Aerogels, Carbon Nanotubes, Dendrimers, Magnetic Molecules, Metallic Nanoparticles, Nanoclays, Photonic Crystals, Quantum Corrals, Self-Assembled Monolayers, Nanowires, Semiconductor Quantum Dots, Fluorescent Semiconductor Nanocrystals)
- *NANOFABRICATION* (Electron-Beam Lithography, Nanoimprint Lithography, Chemical Vapor Deposition, Focused Ion Beams, Pulsed Laser Deposition, Sputtering Deposition, Molecular Self-Assembly, Hydrothermal synthesis, Molecular Beam Epitaxy, Electrospinning)
- *INSTRUMENTS* (Atomic Force Microscopy, Electrostatic Force Microscopy, Magnetic Force Microscopy, Scanning Electron Microscopy, Scanning Near-field Optical Microscopy, Scanning Tunneling Microscopy, Transmission Electron Microscopy, Infrared Spectroscopy, Nuclear Magnetic Resonance, Optical Tweezers, Mass Spectrometry, Ultra Violet and Visible Spectroscopy)
- *APPLICATIONS – NANOELECTRONICS* (Carbon Nanotube Field-Emission Displays, Carbon Nanotube Field-Effect Transistors, Single Photon Detectors, Quantum Dot Light-Emitting Diodes)
- *APPLICATIONS – NANOMATERIALS* (Textile Applications, Automotive Applications, Cosmetics, Filtration membranes, Thermal Insulations)
- *APPLICATIONS - LIFE SCIENCES* (Orthopedic Implants, Bionanotechnology Applications to the Central Nervous System, Nanoporous Membranes in Drug Delivery, Stealth Nanoparticles, Nano Drug Targeting to Tumors, Neural Electrical Interfaces)
- *APPLICATIONS – ENERGY* (Thermoelectric Conversion, Dye

Sensitized Solar Cells, Lithium Ion Batteries)

- *HEAD-FIGURES* (Research Institutes, Companies)

CHARACTERISTICS OF THE CONTENT:

Contains over 300 computer generated animations.

Size on disk: 45.2 MB

PC/MAC compatible

OPERATING SYSTEM REQUIREMENTS:

- 128 MB RAM memory available required (256 MB RAM recommended)
- CD-ROM drive
- Available USB port
- PC with Pentium processor 500 MHz or higher
- Microsoft Windows XP, 2000, NT or Mac OS X 10.3.9 and higher
- Flash Player MX or later for PC, 8 or later for Macintosh;
- SVGA graphics adapter; QuickTime V 4.1.2 or later
- CD-ROM format: Mac/PC (ISO 9660-Joliet) hybrid

PRICES:

For the educational version:

- PC: 175€
- MAC: 175€
- PC & MAC: 215€

For the business version:

- PC: 350€
- MAC: 350€
- PC & MAC: 430€

See prices in USD: http://www.nanopolis.net/order/prices_usd.php

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AUDIENCE:

The "**Exploring Nanotechnology**" encyclopedia is destined for a worldwide audience of:

- Industrialists, technology analysts and decision makers looking for an insight into tomorrow;
- Scientists trying to cope with the inherent interdisciplinarity of a field;
- Students and the general public looking for a highly intuitive presentation of nanotechnology.
- Teachers/professors involved in bio-nanotechnology education.

LIST OF CONTRIBUTORS:

The quality of the information has been proven and validated by high class figures. For more details and extended list of collaborators visit: http://nanotech.nanopolis.net/coauthors.html

EXPLORING NANO-BIOTECHNOLOGY
multimedia encyclopedia CD-ROM

Exploring Nano-Biotechnology is the next multimedia encyclopedia CD-ROM published by Nanopolis™; under development; due to be completed in 2007-2008.

- New and improved analytic techniques
- Deeper understanding of diseases
- Deciphering of cellular mechanisms
- Novel drug development techniques