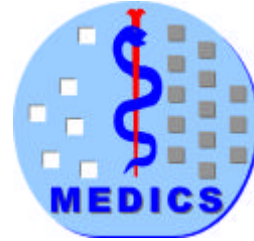

MEDICS

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MEDnews 1/2002 March 1, 2002

Welcome to MEDnews 1/2002, the electronic newsletter of MEDICS, the European Centre of Competence for Biomedical Microdevices. MEDnews is periodically sent to a continuously growing number of friends and partners within the biomedical community. The current distribution list contains more than 1100 recipients.

In October 1997, MEDICS was launched in the framework of the European initiative 'Europractice'. Since January 2002, the MEDICS consortium consists of Fraunhofer Institute for Biomedical Engineering IBMT (D), I2M-Design (E) and Zarlink Semiconductor (S).

MEDICS offers various technology, information and consulting services to stimulate the use of microtechnologies for biomedical applications.

--> For further details on MEDICS please visit:

<http://www.medics-network.com> (the webpage will be updated in March 2002)

--> Do you want to be deleted from this mailing list?

mailto:medics@medics-network.com?subject=unsubscribe_MEDnews

--> Former issues of MEDnews can be downloaded at:

<http://www.medics-network.com/download/>

Yours sincerely

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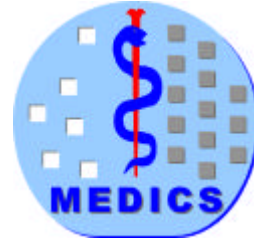
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----- M E D n e w s 1/2002 - March 1, 2002 -----

Topics

1. MEDICS NEWS
2. SPECIAL TOPICS
3. UPCOMING EVENTS

1. MEDICS NEWS

1.1 MEDICS IN PROGRESS

Fraunhofer-IBMT seamlessly continues its successful work in co-operation with new industrial partners: I2M-Design and Zarlink Semiconductor. Fraunhofer-IBMT, the project co-ordinator, stands for more than ten years of industry-oriented r&d in biomedical engineering. Microimplants, biohybrid systems, miniaturised ultrasonic devices, biocompatible packaging & interconnection and biological testing represent only a part of its expertise.

More information: <http://www.ibmt.fhg.de>.

I2M-Design, located in Barcelona (E), is a joint venture of D+T in Spain, CCC in Uruguay and AGR-AIMS in Columbia. I2M-Design has strong links to the CNM and other reputed research institutes in Spain and Latin America. The company offers designing, prototyping and manufacturing services for high-tech biomedical products based on micro- and nanotechnologies.

Internet information will soon be available at <http://www.i2m-design.com>.

Zarlink Semiconductor, the new identity of the Mitel Corporation (NYSE/TSE:MLT), is specialised in the design and manufacturing of medical ASICS. Over one million pacemakers rely on Zarlink's integrated circuits. Zarlink's Medical Design Centre is located in Järfälla (S).

More information: <http://www.zarlink.com>.

MEDICS assists companies in assessing a possible benefit from microtechnologies for their specific applications and supports the development of completely new types of biomedical devices or the technical improvement of existing devices. MEDICS' services include:

- feasibility assessments of microtechnologies for biomedical applications

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- assessment of the impact of microtechnologies for your specific application
- access to silicon- & polymer-based key modules, biocompatible packaging & interconnection technologies and basic components necessary for the device development
- information services for the biomedical community (internet information, workshops & training courses)
- access to the appropriate design and manufacturing capacities.

MEDICS' services rely on the expertise of the consortium members. However, wherever necessary, special know-how and capacities from our broad European network will be included in order to give customers the support they need.

For further information please visit our homepage <http://www.medics-network.com> which is at present being redesigned with regard to the latest internal developments. A complete list of MEDICS' services will follow in our next newsletters.

1.2 AWARD FOR MEDICS' OFFICE SOUTH

On February 11, 2002, Jordi Aguilo, from MEDICS' Office South at I2M-Design, received the medal of honour from the city of Barcelona for his work with Microtrans.

Microtrans is a biomedical sensor used for the monitoring of parameters such as the temperature or the pH of organs due for transplantation; it is a device which tremendously enhances the viability assessment of such organs.

For further information please check

http://www.cnm.es/~mtrans/English/index_english.html.

1.3 STUDY ON INTRACORPOREAL FORMS OF ENERGY FOR IMPLANTS FROM FRAUNHOFER-IBMT

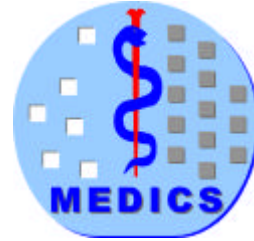
As a supplier of r&d services, Fraunhofer IBMT also carries out scientific studies on various topics. We have just completed a study on the possibilities of using intracorporeal forms of energy for implants, which is available in German. If you are interested in the study, please mailto:medics@medics-network.com?subject=intracorporeal_energies.

1.4 ARTICLE 'IMPLANTABLE MICROSYSTEMS FOR MONITORING AND NEURAL REHABILITATION'

Thomas Stieglitz, head of the Neuroprosthetics team at Fraunhofer-IBMT and scientific consultant for MEDICS, has published an article ('Implantable Microsystems for Monitoring and Neural Rehabilitation') in the renowned magazine Medical Device Technology. Part I of the article, published in the December 2001 edition, describes microdevices for diagnosing and monitoring blood, brain and intraocular pressure inside

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the body, as well as a retina implant system. Part II, published in the January/February 2002 edition, discusses recent work on distributed intelligent implants and biohybrid systems, which combine microsystems with cells and tissues. The articles can be downloaded at <http://www.medics-network.com/download/>.

2. SPECIAL TOPICS

2.1 MEDTEC SHOW, STUTTGART (D), MARCH 5-7, 2002

The European medical manufacturing suppliers show, MEDTEC, will take place in Stuttgart (D), March 5-7, 2002. Fraunhofer-IBMT and Zarlink Semiconductor will be present at the MEDTEC.

Fraunhofer-IBMT with its competence centres MEDICS, the European Centre of Competence for Biomedical Microdevices, and MOTIV, the German Centre of Competence specialized in monitoring- and interventional systems, will have a booth at the MEDTEC, which is integrated in the Fraunhofer-Society booth.

You will find us in hall 8, booth 1317.

Fraunhofer-IBMT will present the following topics:

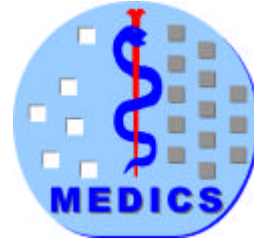
- functional biosensors
- cell and tissue based screening
- individual diagnostic
- microimplants & endosystems
- bio-chip-scanners
- telemonitoring
- computer aided engineering
- information & consulting services.

For more information on the MEDTEC, please check <http://www.medtecshow.com>. If you are interested in arranging an appointment at our booth, please <mailto:medics@medics-network.com?subject=MEDTEC>. On March 5, 2002, an event will be organised at the Fraunhofer-Society booth at 11 a.m., where services, visions, innovations, as well as new techniques and materials etc. will be introduced to the press.

Zarlink Semiconductor, specialised in the design and manufacturing of medical ASICS, will present exhibits, as for example chips, but also end products relying on their circuits from the fields of pacemakers and hearing aids. You will find Zarlink Semiconductor in hall 6, booth 222, where specialists will be ready to offer consulting services with regard to medical ASICS design.

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2.2 BIOMEDICAL WORKSHOP, GUADALAJARA (MEXICO), APRIL 2, 2002

The 4th Iberoamerican workshop on technologies for biomedical applications will take place in Guadalajara (Mexico), April 2, 2002. The workshop will be an occasion to get an impression of the biomedical applications market, worldwide and in South America, as well as of the state-of-the-art of technologies for biomedical applications. On that occasion, Jordi Aguiló (I2M-Design) and J.-Uwe Meyer (Fraunhofer-IBMT) will give presentations on MEDICS and 'High density chip integration for biomedical devices'.

More information: <http://www.cnm.es/~micromed/talleres.html>

3. UPCOMING EVENTS

3.1 Fraunhofer-IBMT at the International Conference on Advanced Packaging and Systems & Tabletop Exhibition (ICAPS) in Reno (USA), March 10-13, 2002.

Presentation: 'Medical Implants and other Biomedical Devices using Microflex Interconnection Technologies', by J.-Uwe Meyer.

More information: <http://www.imaps.org/icaps2002/>.

3.2 Fraunhofer-IBMT at the XXXII DEG-BV Congress in Munich (D), March 13-16, 2002.

Presentation: 'Biocompatible Microcellsystems as Cell-Interface', by Thomas Velten.

More Information: <http://www.medkongresse.de/dgebv/programm.htm>.

3.3 Fraunhofer-IBMT at the 2nd Annual International IEEE-EMBS Special Topic Conference on Microtechnologies in Medicine & Biology in Madison, Wisconsin (USA), 2-4 May, 2002.

Presentation: 'A Biohybrid Microprobe for Implanting into the Peripheral Nervous System', by J.-Uwe Meyer.

More information: <http://mmb.bme.wisc.edu/mmb2002/>.

3.4 Fraunhofer-IBMT at the 7th Annual Conference of the International Functional Electrical Stimulation Society - IFESS 2002 - in Ljubljana, Slovenia, June 25-29, 2002.

Different presentations on Bioelectrical Signal Recording, Corrosion of Thin-Film Electrodes, Encapsulation of Microimplants with Parylene C, Biocompatible Microsystems as Cell-Interface, by Klaus-Peter Koch, Martin Schuettler, Thomas Stieglitz.

More information: <http://robo.fe.uni-lj.si/ifess2002/>.

----- MEDnews 1/2002 - Thank you very much for your attention -----

