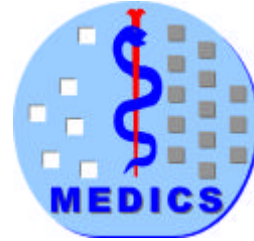


MEDICS

Access to Expertise and Technologies



MEDnews 2/2001 July 25, 2000

Welcome to MEDnews 2/2001, this year's second electronic newsletter of MEDICS, the European Centre of Competence for Biomedical Microdevices. MEDnews is sent four times per year to a continuously growing number of friends and partners of MEDICS. The current distribution list contains more than 1000 recipients.

In October 1997, MEDICS was launched in the framework of the European initiative 'Europractice'. MEDICS is hosted by the Fraunhofer Institute for Biomedical Engineering IBMT in Sulzbach (D) and by the Centro Nacional de Microelectronica CNM in Bellaterra (E). Since 1999, MEDICS has been operating as a profit centre at IBMT.

MEDnews provides you with information on services and activities related to development and application of biomedical microdevices.

--> For further details of MEDICS' services and activities, please visit:

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

--> 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

Andreas Schneider

Andreas Schneider

Project Manager

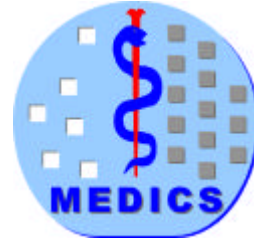
MEDICS at Fraunhofer IBMT

Industriestrasse 5, D-66280 Sulzbach

Tel: +49 (0)6897/9071-42, Fax: -49

<mailto:medics@medics-network.com>

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



----- M E D n e w s 2/2001 - July 25, 2001 -----

Topics

1. MEDICS in Progress
2. News on MEDICS' Partners
3. Upcoming Events

- 1. MEDICS in Progress

The latest version of the catalogue 'Available Flexible, Light-weighted Microelectrodes' is available since July 2001. Major application fields of these microelectrodes are: neural prosthetics and neurosciences, biosensing, pharماسcreening.

Since 1999, MEDICS has delivered more than 2000 microelectrodes manufactured at IBMT to customers in these fields. The catalogue gives a detailed description of the standard designs readily available at IBMT and is thus an excellent evidence for the IBMT's expertise and know-how, particularly with regard to hybrid designs (combination of polyimide and silicone) and the integration of different microelectronic components. However, apart from these standard designs, custom-made designs, are, of course, possible.

If you are interested in receiving the electrode catalogue, please mailto:medics@medics-network.com?subject=electrode_catalogue

The nationwide operating Competence Centre for Miniaturized Monitoring and Intervention Systems (MOTIV), which is hosted by MEDICS, has been intensifying its work.

MOTIV's main objective is to create an infrastructure for supporting research and development in three biomedical areas:

1. Therapy/ Therapy Control,
2. Ambulatory Care and Homecare,
3. Microimplants and Endosystems.

It is MOTIV's aim to support start-up businesses and companies that want to enter the biomedical market or strengthen their position on that market, from the idea over research to the development and marketing of innovative products.

If we can assist you (e.g. with research or finding co-operation partners), please do not hesitate to contact Jochen Schmidt.

MEDICS

Access to Expertise and Technologies



As of August 2001, you can also reach us via our homepage <http://www.motiv-medtech.de>, which is under construction now.

More information:

Jochen Schmidt

Tel: +49 (0)6897/9071-41

<mailto:medics@medics-network.com>

Sacral root stimulator developed at CNM

The sacral root microstimulator should be available for commercialisation very soon. This new biomedical system will give back paralytic patients control over some physiological functions (defecation, micturition, erection), which will improve their quality of life significantly. So far, the clinical tests of the microstimulator realised with patients were successful.

The microstimulator ERS I is implantable and includes a chip designed for low power consumption and minimal size. The chip "sacralrootst04" contains the stimulation circuits with the logic control of the stimulator and the telemetry system. This system is fed with radiofrequency from an external unit.

More information can be found at

<http://www.cnm.es/imb/pages/products/ers.PDF>

2. News on MEDICS' Partners

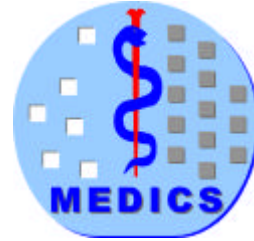
MEDICS' partner Bartels Mikrotechnik is developing and manufacturing a new and unique fluidical actor. The so called 'actor plate' consists of a microstructured membrane that is driven by hydraulic pressure and switched by an electro-rheological valve. It can be used as a single device or in large arrays. The computerized optimization of its shape was done within OMID, a BMBF-funded project. OMID's aim is to develop efficient tools for the simulation and optimization of medical devices. The current status of both, the actor plate and the OMID project, is presented at a seminar in Bremen, October 9-10, 2001.

More information can be found at <http://www.item.uni-bremen.de/omid> or at <http://www.bartels-mikrotechnik.de>.

3. Upcoming Events

MEDICS

Access to Expertise and Technologies



Fraunhofer IBMT at the BMT 2001 in Bochum (Germany), September 19-21, 2001. Different presentations on implantable systems for FES (microelectrodes, stimulators, telemetry): Thomas Loew, Klaus-Peter Koch, Frank Ihmig, Andreas Staiger, Thomas Stieglitz, Martin Schüttler.

More information: <http://www.bmt2001.de>

Fraunhofer IBMT at the 2001 IEEE International Ultrasonics Symposium in Atlanta (USA), October 7-10, 2001.

Presentations:

"A System for Ultrasound-Based Intraoperative Navigation in Spine-Surgery", by Peter K. Weber;

"Study of PZT coated membrane structures for micromachined ultrasonic transducers", by Daniel Schmitt.

More information: <http://www.ieee-uffc.org/2001/>

Fraunhofer IBMT at the CADFEM-User-Meeting 2001 in Potsdam (Germany), October 17-19, 2001.

Presentations:

"Modeling piezoelectric micromachined ultrasonic transducers", by Daniel Schmitt;

"Computer Aided Acoustical Design - Large Scale Problems, Chances and Limits", by Peter K. Weber.

More information: <http://www.cadfem.de>

Fraunhofer IBMT at the IEEE-EMBC 2001 in Istanbul (Turkey), October 25-28, 2001.

Presentations:

"Reducing Insertion Sites of Penetrating Multipolar Shaft Electrodes by Double Side Electrode Arrangements", by Thomas Stieglitz;

"Reducing Stiffness and Electrical Losses of High Channel Hybrid Nerve Cuff Electrodes", by Martin Schüttler.

More information: <http://embc2001istanbul.bme.boun.edu.tr>

----- MEDnews 2/2001 - Thank you very much for your attention -----