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15[™] INTERNATIONAL CONFERENCE FOR RENEWABLE RESOURCES AND PLANT BIOTECHNOLOGY (NAROSSA® 2009)

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NAROSSA® 2009 conference was held in Poznan (Poland) in June 8–9, 2009. The organizers of the conference were the association Pilot Pflanzenultechnologie Magdeburg e. V. (PPM), Institute of Natural Fibres and Medicinal Plants and BIO Mitteldeutschland GmbH, and the sponsor of this conference was OHMI Consulting GmbH. This conference was under the patronage of Minister of Agriculture and Environment of Saxony-Anhalt Land.

Prof. Dr. Ryszard Kozlowski (INF) and Dr. Frank Pudel (OHMI Consulting GmbH) were co-chairmen of this conference: Dr. Melvyn F. Askew (Central Science Laboratory, York, United Kingdom), Dr. Peter Bloß (Kunststoff-Zentrum in Leipzig gGmbH, Leipzig, Germany), Dieter Bockey (UFOP e. V., Berlin, Germany), Dr. Susanne Brandt (Landesbauernverband Sachsen-Anhalt e. V., Magdeburg, Germany), Torsten Graf (Thüringer Landesanstalt für Landwirtschaft, Dornburg, Germany), Dr. Jens A. Katzek (BIO Mitteldeutschland GmbH, Halle (Saale), Germany), Dr. Paul P. Kolodziejczyk (Olds College School of Innovation, Olds, Alberta, Canada), Dr. Katalin Kövari (Bunge Europe Research and Development Center, Budapest, Hungary), Prof. Dr. Ryszard Kozlowski (Institute of Natural Fibres, Poznan, Poland), Prof. Dr. Lothar Mörl (Otto-von-Guericke-Universität Magdeburg, Magdeburg, Germany), Ass. Prof. Dr. Marijana Perifanova (Higerher Institute of Food and Flavour Industries, Plovdiv, Bulgaria), Prof. Dr. Ingo Schellenberg (Hochschule Anhalt, Bernburg, Germany), Dr. Heike Schimpf (Landesanstalt für Landwirtschaft Forsten und Gartenbau, Bernburg, Germany), Dr. Ralph Thomann (Institut für Getreideverarbeitung GmbH, Bergholz-Rehbrücke, Germany), Prof. Dr. Grete Bach (IfN - Instituf für Neuwertwirtschaft GmbH, Tröglitz, Germany), Dr. Ute Bauermeister (Fördergemeinschaft Ökologische Stoffverwertung e. V., Halle (Saale), Germany), Dr. Matthias Gohla (Fraunhofer IFF - Institut für Fabrikbetrieb und -automatisierung, Magdeburg, Germany), Prof. Dr. Gennady E. Zaikov (N. M. Emanuel Institute of Biochemical Physics, Moscow, Russia) were members of Scientific Committee of this conference.

Scientific program of the conference included 22 lectures and 22 poster presentations

The topic of first lecture was about the state of the art of the renewable resources in Poland (R. Kozlowski, M. Talarczyk-Mackiewicz, P. Baraniecki, Institute of Natural Fibers and Medicinal Plants, Poznan, Poland). The second lecture was about the German Biomass Research Center (M. Seiffert, DBFZ Deutsches Biomasseforschungszentrum gGmbH, Leipzig, Germany). Cooperation between Germany and Lithuania on bioenergy was discussed in the third lecture (H. Herold, Potsdam, Germany).

The information about efficiency of hemp essentials oil depending on sowing density and time of inflorescence harvest was included in the talk of H. Burczyk, R. Kaniewski, W. Konczewicz, N. Kryszak, J. Turowski (Institute of Natural Fibers and Medicinal Plants, Poznan, Poland). K. Heller; M. Byczynska; Z. Woznica (Institute of Natural Fibers and Medicinal Plants, Agricultural University of Poznan, Poznan, Poland) spoke about IWN-11 the new biostimulator for increasing crops resistance to drought stress. K. Wielgus, G. Mankowska, J. Przewozna, L. Grabowska and R. Slomski (Institute of Natural Fibres and Medicinal Plants, Poznan University of Life Sciences, Poland) gave presentation about polymorphism of THCA synthase gene in the genetic resources of Cannabis sativa L. collected at the Institute of Natural Fibres and Medicinal Plants. The lecture of J. Venus (ATB) Potsdam, Bioengineering, Potsdam, Germany) was devoted to pilot plant for the bioconversion of renewable feedstocks.

A. Al Mamun, A. K. Bledzki, J. Volk (Material Engineering, University of Kassel, Kassel, IGV GmbH, Bergholz-Rehbrücke, Germany) spoke about enzyme modified grain by-product reinforced polypropylene composites. Recent advances in flax biotechnology were discussed in the lecture of A. Pretova, B. Obert, L. Uvackova (Institute of Plant Genetics and Biotechnology, Nitra, Slovakia).

Some lectures were devoted to the next problems: yellow natural dyestuffs and their light fastness properties

and UV protection on natural fabrics (K. Schmidt-Przewozna, J. Kowalinski, Institute of Natural Fibers and Medicinal Plants, Poznan, Poland), challenges of extraction, processing and application of rape seed proteins (J.-P. Krause, F. Pudel, R.-P. Tressel, PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Germany), a new fluidized bed desolventiser for gentle rapeseed meal processing (K.-H. Leidt, L. Mörl, F. Pudel, K. Weigel, R. Zettl (PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Otto von Guericke University Magdeburg, Dr. Weigel Anlagenbau GmbH, Magdeburg, Germany) and production of biofuels, green chemicals and hydrogen from glycerol and cellulosic resources (S. Dabrowski, A&A Biotechnology, Gdynia, Poland).

The information about purposeful coating of vegetable agents in a fluidized bed was presented by L. Mörl, H. Haida, W. Behns, M. Jacob, M. Täger, S. Ansorge (Otto von Guericke University Magdeburg, Institute of Process Equipment and Environmental Technology, Glatt Ingenieurtechnik GmbH Weimar, IMTM - Immune Technologies and Medicine Magdeburg). M. Nordkvist, F. Pudel, T. Krause, L. Brühl, B. Matthäus (ISO-MIX A/S, Ishoj, Denmark, PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Germany, Max Rubner Institut, Münster, Germany) spoke about the influence of de-oxygenation on the quality of linseed oil.

C. Blobner, I. Ehrhardt, E. Schotte, M. Wäsche (Fraunhofer Institute for Factory Operation and Automation IFF, Magdeburg, Germany) gave presentation

about best practices and technologies for developing green wastes and residues as raw materials for variants of utilization. The lecture of G. Bach and R. Hommel (Institut für Neuwertwirtschaft FTZ GmbH, Elsteraue, Germany) was devoted to vetiveria zizanioides grass as a useful tool.

Enzymatic transesterification of rapeseed oil using methyl acetate was discussed in the lecture of G. Fleck and F. Pudel (PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Germany).

The last presentations were devoted to the next problems: prediction of biodiesel cold flow properties in dependence on feedstock mixtures (M. Rohrbeck, F. Pudel, PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Germany), improvement of biodiesel cold flow properties by epoxidised fatty acid esters (Z. Saleem, F. Pudel, PPM Pilot Pflanzenöltechnologie Magdeburg e.V., Magdeburg, Germany) and the effect of sowing density on profitability of industrial hemp biomass (H. Burczyk, L. Grabowska, M. Strybe, P. Baraniecki, Institute of Natural Fibers and Medicinal Plants, Poznan, Poland)

Poster session included 22 reports about some aspects of plant biotechnology and renewable resources.

The problems which were discussed during this conference are very important for pure as well as for practical application.

The next NAROSSA® conference will be held in Poland on the base of Institute of Natural Fibers and Medicinal Plants in June, 2010.