

- 45 Announced at: 2012 04 30**
 Contact person: Dr.JurateKriauciuniene, Head of Hydrology Laboratory
 E-mail: hydro@mail.lei.lt
 Telephone: +37037401962
 Fax: +37037401963
 Institution address: Lithuanian Energy Institute (LEI) Breslaujos 3 LT-44403 Kaunas Lithuania
 Research interests: Project title is "Projects of Lithuania-Latvia-Taiwan" for the 2013-2015 years.
 Scientists from LEI are interested in these research areas of project:
 - energy and resource saving and environmental, friendly technology, new sources of energy;
 - wave energy and rivers potential and kinetic energy;
 - ecology and rational use of natural resources.
 We'd like to find partners in the field: water resources (eco-hydrology).
 We are open for different suggestions from these two themes.
 We'd like to find partners in the field of new sources of energy:
- 44 Announced at: 2012 04 13**
 Contact person: Prof. Igor Lemberski
 E-mail: igor.lemberski@bsa.edu.lv
 Telephone: +371 22 33 29 61
 Fax: +371 67241272
 Institution address: Address of Institution: Lomonosova 4, Riga, Latvia LV-1019
 Research interests: Digital circuits (both synchronous and asynchronous) synthesis
 FPGA logical and physical synthesis
 Energy-aware circuits design
 Logic synthesis for area, speed, power
 All aspects of sequential circuits design
 Circuits synthesis tools and flows
- 43 Announced at: 2012 03 09**
 Contact person: Ruta Muceniece
 E-mail: Ruta.Muceniece@lu.lv
 Telephone: +371 67362499
 Fax: +371 67366306
 Institution address: Address of Institution: Faculty of Medicine of University of Latvia, Sarlotes Str. 1a, Riga, LV-1001, Latvia
 Research interests: Research interests or Summary of research proposal: Functional food and cell research. Investigation how foods or food components may provide health and wellness benefits. Measurement of content of lunasin an anti-cancer peptide in cereals, and comparison of content of lunasin in biologically and conventionally grown barley. Measurement of glycoalkaloids in potato or other plants. Screening of plant extracts and chemicals on cancer cell lines, normal and stem cells in vitro. Antioxidant, anticancer, antiinflammatory effects of compounds or extracts in vitro.
- 42 Announced at: 2012 02 20**
 Contact person: Chi-Shiun Chiang, PhD., Prof.
 E-mail: cschiang@mx.nthu.edu.tw
 Telephone: +886-3-5733168
 Fax: +886-5718649
 Institution address: Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University, Taiwan,;101 Sec. 2, Kuang Fu Road, Hsinchu 30013, Taiwan.
 Research interests: Plant extracts on neurodegenerative diseases. Impact of the deposition of environmental nanometal particles on the progression of neurodegenerative diseases
- 41 Announced at: 2011 05 23**
 Contact person: Von-Wun Soo
 E-mail: bkwei@nccu.edu.tw
 Telephone: +886-3-5731068
 Fax: +886-3-5731068
 Institution address: 101 section 2 Kuan-Fu Road, Hsinchu, Taiwan 30043; www: <http://ai.cs.nthu.edu.tw/soo/>
 Research interests: Artificial Intelligence, data mining, bioinformatics and medical applications, machine learning, virtual agents in interactive drama and story generation, smart grid.
- 40 Announced at: 2010 05 10**
 Contact person: Assistant Professor Bai-Ku, WEI
 E-mail: bkwei@nccu.edu.tw
 Telephone: +886-2-29393091 ext. 51303
 Fax: +886-2-29387124
 Institution address: Graduate of Institute of Russian Studies, National Chengchi University, No. 64, Sec. 2, Chinan Rd. Wenshan, Taipei, TAIWAN 11605; www: <http://russian.nccu.edu.tw/english.htm>

Research interests: Comparative Study of Political and Economic Transformation in Taiwan, Latvia and Lithuania

39 Announced at: 2010 04 21

Contact person: Vidmantas Karalius, Dr.

E-mail: karalius@ekoi.lt

Telephone: +370 600 13544

Fax: +370 52 729352

Institution address: Institute of Ecology, Nature Research Centre Akademijos 2, Vilnius-21 LT-08412 Lithuania

Research interests: insect-plant relations by semiochemicals, plant resistance against herbivorous insects; insect pheromones and behavior, chemical ecology; insect population ecology, dynamics, monitoring, pest control and conservation of endangered species, insect outbreaks; natural and seminatural ecosystems, their stability and threads in global change perspective

38 Announced at: 2010 04 16

Contact person: Jūratė Klumbienė, PhD., Prof.

E-mail: jurklumb@vector.kmu.lt

Telephone: +37037 302960

Fax: +37037 302959

Institution address: Kaunas University of Medicine, Institute for Biomedical Research, Laboratory of Preventive Medicine Eiveniu str. 4, LT-3007 Kaunas Lithuania

Research interests: - Evaluation of the trends in health behaviour in different sociodemographic groups of Lithuanian adult population.
- Assessment of changes in health of Lithuanian population related to social factors.
- Investigation of arterial hypertension development among young adults.
- Assessment of the associations among health status, life style, quality of life, physical and social environment in young people population.
- Nutrition and diet related factors of chronic diseases.

37 Announced at: 2010 04 08

Contact person: Dr. Da-Ren Chen

E-mail: danny@cc.hwh.edu.tw

Telephone: +886-2-8941-5143 ext.117

Fax: +886-2-8941-5142

Institution address: Department of Information Management, Hwa-Hsia institute of technology 111 Gong Jhuan Rd., Chung Ho, Taipei, Taiwan, R.O.C

Research interests: Energy-harvesting applications in the pointing Devices

Many manufacturers of wireless mouse claim to never have to recharge or change batteries. Most of them apply the principle of RFID in the wired mouse pads and launch the radio to the mouse equipped with an induction coil. The energy generated across the coil therefore can drive the wireless mouse. However, these mouse themselves cannot be away from the mouse pad or radio sources, usually 1 to 5 cm distance. In addition, the power required for launching radio frequency are usually supplied by the host computers, contrary to the trend in energy efficiency. Other similar products only use the reciprocating generator, or in a special mouse pad to generate a moving magnetic field changes and generate the energy. The capacity of generated energy can only extend the batter life-time and are insufficient to support continuously the operation of the devices. The goal of this project is to design a completely renewable energy wireless mouse. We integrated the latest collection of energy harvesting technologies for wireless mouse which can be recharged through them whether it is in use or not. The wireless mouse actually gets rid of "wired" and "recharge" issues. Our project is divided into the following directions:

1. Development of thermoelectric generator
2. Development of piezoelectric materials
3. Development of wireless power
4. Development of photovoltaic devices
5. Applications of electromagnetic micro power generator
6. Integration of energy-harvesting devices
7. Design of low-power charging circuit

36 Announced at: 2010 03 15

Contact person: Dainis Rungis

E-mail: dainis.rungis@silava.lv

Telephone: +371 28344201

Fax: +371 67901359

Institution address: Rigas 111, Salaspils, LV-2169 Latvia; www: www.silava.lv, www.genres.lv

Research interests: The Genetic Resource Centre (GRC), was founded in 2006 under the administration of Latvian State Forestry Research Institute "Silava" The GRC is responsible for coordinating all Latvian genetic resource activities, including crop and fruit species, vegetables, aromatic and medicinal species, forestry, animal and fish genetic resources. The GRC incorporates the Latvian gene bank, the central database and a genetic analysis laboratory. Our main focus is the molecular genetic analysis of crop and forestry species. We are utilising neutral DNA markers to investigate the population structure and genetic diversity of forest tree species and crop and animal genetic resources, as well as incorporating the use of DNA markers into breeding programs. In addition, we are using molecular genetic approaches (gene and protein expression structure, and function) to study economically important traits in forest tree species (pathogen resistance and wood quality).

-
- 35 Announced at: 2009 04 08**
 Contact person: Prof. Chen, Chao-Shun, Dr. Hsieh, Shih-Chieh
 E-mail: hsiehten@isu.edu.tw; yenchchen@isu.edu.tw
 Telephone: +886 7-6577711
 Fax: +886 7-6577205
 Institution address: No. 1, Sec. 1, Syuecheng Rd., Dashu Township, Kaohsiung County 840, Taiwan, R.O.C; www: <http://www.ee.isu.edu.tw>
 Research interests: Study of smart power grid with integration of wind generators (WG) and PV (DG) to enhance the power quality of distribution systems. The project includes
 1. The transient stability analysis to determine the setting of tie line tripping and load shedding so that the power service of critical loads can be maintained with low voltage ride through capability. The mathematical models of WG, PV, power networks, flexible AC transmission devices (FACTS) are included in the simulation.
 2. Evaluation of power system planning and operation by considering the penetration of WG and PV. Especially, the impact analysis of DG to system voltage, system protective coordination, power flow, etc. To achieve high service reliability of power system by considering area load growth forecasting, probabilistic DG generation, capacity reserve to cover the system loading.
 3. Design of distribution automation system (DAS) and automatic metering infrastructure (AMI) to enhance the efficiency of distribution system and customer services. The demand response (DR) function is implemented for the control of customer appliances to achieve optimal usage of electric power according to the real time pricing and possible renewable energy generation.
-
- 34 Announced at: 2009 03 23**
 Contact person: Eglė Zuokaite
 E-mail: egle.zuokaite@ap.vgtu.lt
 Telephone: +370-5-2744724
 Fax: +370-5-2744726
 Institution address: Vilnius Gediminas Technical University Faculty of Environmental Engineering Department of Environment Protection Saulėtekio al. 11, SRK-II, 306 room LT-10223, Vilnius, LITHUANIA ; www: <http://www.aak.ap.vgtu.lt/>
 Research interests: Composting technology of municipal sewage sludges Odor emissions from sludge processing and treatment Odor control for municipal sludge composting Biotechnology for odor and air pollution control.
-
- 33 Announced at: Jan. 26, 2009**
 Contact person: Auksė Mickienė
 E-mail: infekcija@med.kmu.lt
 Telephone: +370-37-362350
 Fax: +370-37-362350
 Institution address: Clinic of Infectious Diseases, Kaunas University of medicine Baltijos 120 LT-47116, Kaunas LITHUANIA ; www: www.kmu.lt
 Research interests: Nosocomial pathogens, correlation between antibacterial resistance and consumption of antibiotics. Genotyping of nosocomial pathogens. Genotyping of invasive and noninvasive *Streptococcus pneumoniae* isolates and genetic analysis of genetic determinants of antibacterial resistance. Genetic diversity and variability of human hepatitis C and B virus.
-
- 32 Announced at: Jan. 22, 2009**
 Contact person: Dr. Viktor Medvedev
 E-mail: Viktor.M@kti.mii.lt
 Telephone: +370-5-2109304
 Fax: +370-5-2729209
 Institution address: Systems Analysis Department, Institute of Mathematics and Informatics, Akademijos str. 4 LT-08663 Vilnius, LITHUANIA; www: www.mii.lt
 Research interests: Data Mining, Multidimensional Data Visualization, Neural Networks, Image Analysis, Medical Applications, Multiple Criteria Decision Support, Optimization, Machine Learning.
-
- 31 Announced at: Jan. 12, 2009**
 Contact person: Dr. Jolita Radušienė
 E-mail: jolita.r@botanika.lt
 Telephone: +370-5-2701351
 Fax: +370-5-2729950
 Institution address: Laboratory of Economic Botany, Institute of Botany, Zaliuju Ezeru 49, LT-08406, Vilnius, Lithuania
 Research interests: Plant genetic resources of medicinal and aromatic plants and development of their conservation strategies; Ecological and phytochemical (phenolics and essential oils) diversity on medicinal and aromatic plants and selection of valuable accessions; Ethnobotanical knowledge on plant uses; Chemotaxonomical indication.
-
- 30 Announced at: Jan. 06, 2009**
 Contact person: Aistė Diržytė, PhD, Assoc. Prof.
 E-mail: aiste.dirzyte@vipinstitutas.lt
 Telephone: +37061459911
 Institution address: Institute of Management and Psychology, Puckoriu 15, Vilnius, LT-11300, Lithuania; www: www.vipinstitutas.lt
 Research interests: Organizational behavior, HR management, Management psychology, business psychology, Positive psychology, quality of life, lifestyles of different age groups, Cognitive therapy, cognitive

-
- 29 Announced at: Dec. 06, 2007**
 Contact person: Assoc. Prof. Dr. Saulius Diliūnas
 E-mail: Saulius.Diliunas@ktu.lt
 Telephone: +370-37-30-0427
 Fax: +370-37-32-4108
 Institution address: Department of Solid Mechanics Kaunas University of Technology
 Kestucio 27, LT-44312, Kaunas, Lithuania; www:
<http://www.ktu.lt/dkmm/>
 Research interests: Modelling and design of polymer-based composite materials and
 lightweight structures, Modelling and investigation of polymeric
 materials with optimized weight/stiffness ratio.
-
- 28 Announced at: Oct. 30, 2006**
 Contact person: Polyakov Valery
 E-mail: polyakov@pmi.lv
 Telephone: +371- 7453312
 Fax: +371-7820-467
 Institution address: Institute for polymer mechanics, Latvian State University,
 Aizkraukles st.23, LV-1006 Riga, Latvia
 Research interests: Analytical modelling of high-frequency wave process in layered
 media under transversal wave transmission
-
- 27 Announced at: Dec. 14, 2005**
 Contact person: Dr. Donatas Kaminskas, Prof.assoc.
 E-mail: donatas.kaminskas@gf.vu.lt
 Telephone: +37052398274
 Fax: +37052398272
 Institution address: Dept of Geology and Mineralogy, Faculty of Natural Sciences,
 Vilnius university, Ciurlionio str 21/27,LT-03101,Vilnius, Lithuania
 Research interests: Silurian
 - palaeogeography
 - paleobasins modeling,
 - Silurian geochemistry,
 - isotopic&cathodoluminescence analysis,
 have an access to extensive silurian drillcores (Lithuanian);
 seeking partnership in isotope analysis of Silurian as well as in
 other geochemistry&mineralogy related fields. Currently, focusing
 on carbonate diagenesis.
 Ref.List: <http://193.219.43.40/kaminskas.pdf>
-
- 26 Announced at: Dec. 06, 2005**
 Contact person: Jelena Davidova
 E-mail: zinda@dau.lv
 Telephone: +371 9140287
 Fax: +371 5425452
 Institution address: Daugavpils University
 Research interests: The Development of Music Pedagogy: music pedagogy history,
 philosophy of music education, gifted pupils in music, assessment
 in music education, instrumental teaching.
-
- 25 Announced at: Dec. 07, 2004**
 Contact person: Juras Banys
 E-mail: juras.banys@ff.vu.lt
 Telephone: 00 370 52366077
 Fax: 00 370 52366081
 Institution address: Radiophysics Department, Faculty of Physics, Vilnius University,
 Sauletekio 9, bldg. 3, LT-10222 Vilnius, Lithuania
 Research interests: The research group of Prof.J.Banys participating in this proposal is
 laboratory of phase transitions dielectric spectroscopy and have a
 more than 40 years of experience in high frequency dielectric
 measurements of ferroelectrics and related materials. There are
 more than seven home build spectrometers which cover frequency
 range from 20 Hz up to 150 GHz. The top level is confirmed by
 monograph of Prof.J.Grigas, , Microwave dielectric Spectroscopy of
 Ferroelectrics and Related Materials (Gordon and Breach Publ.Inc.,
 1996), p.320.
 We are investigating dielectric properties of relaxors, ferroelectrics
 and related materials in the frequency range 20 Hz to 120 GHz.
 From the obtained dielectric spectra we can calculate the
 relaxation parameters - the mean relaxation time, width of the
 distributions of the relaxation time. Also, from the whole spectra
 we are able to calculate the shape of the distribution function of
 the relaxation times.
 Previous experience: we have measured PLZT relaxor ceramics,
 PSN-PZN-PMN relaxor ceramics, BNNT, dipolar glasses BP/BPI.
 Another field:
 -- Dielectric spectroscopy investigations of mesoporous MCM-41
 and SBA-15 molecular sieve materials.
 Internet address: <http://rfk.ff.vu.lt/ferrolab/index.htm>
-
- 24 Announced at: Dec. 07, 2004**
 Contact person: Prof.dr.habil. Palmira Juceviciene

Contact person: erinija@ktu.lt
 E-mail: ei@ktu.lt
 Telephone: +370 37 300131
 Fax: +370 37 300102
 Institution address: K. Donelaičio 20 – 400, LT - 44239 Kaunas, Lithuania
 Research interests: -- Development of research methodology in education: qualitative and quantitative strategies for the real world research;
 -- Philosophy and systems of higher education and continuing education: massification of higher education;
 -- Service university development;
 -- Educational management and modernization of educational system: school and leadership effectiveness;
 -- Educational innovation and its implementation in educational organizations through action research;
 -- Competence development and recognition: competence-based study programs;
 -- Accreditation of prior learning; fostering the individuals' learning by formation of educational/learning environments;
 -- Learning organizations, learning networks, learning regions development;
 -- Communication for facilitating European integration: multicultural aspects of education;
 -- Social inclusion for the democratic development of the society.

23 Announced at: Apr. 30, 2004

Contact person: Vladimirs Kapustins
 E-mail: info@fuelmax.lv
 Telephone: (+371) 7220244 or (+371) 9183734
 Fax: (+371) 7220355
 Institution address: Marijas 1-23, LV-1050, Riga, Latvia
 Research interests: **(EN)** The company working in the Baltic countries offers co-operation to the organizations and the private businessmen interested in promotion of the newest American development in the field of economy of fuel on all kinds of vehicles www.fuelmax.lv.
(FR) La compagnie travaillant aux pays Baltiques propose la coopération aux organisations et les employeurs privés intéressés par la progression de l'élaboration plus récente américaine dans le domaine de l'économie du combustible sur tous les aspects des véhicules info@fuelmax.lv.

22 Announced at: Jan. 5, 2004

Contact person: Apolinaras Zaborskis
 E-mail: socped@kmu.lt
 Telephone: +370 37 30 29 69
 Fax: +370 37 30 29 59
 Institution address: Kaunas University of Medicine,
 Institute for Biomedical Research,
 Laboratory for Social Pediatrics,
 Eiveniu str. 4, LT-3007 Kaunas Lithuania
 Research interests: - Lifestyle and health behaviour of young people, including eating habits, physical activity, smoking, alcohol and drugs consumption.
 - Health education and health promoting programmes among children and their families, development of materials for health education in kindergartens and schools.
 - Quality of life of children with special respect to disabled children.

21 Announced at: Aug. 11, 2003

Contact person: Jih-Gaw Lin
 E-mail: jglin@cc.nctu.edu.tw
 Telephone: +886 3 5722681
 Fax: +886 3 5725958
 Institution address: Institute of Environmental Engineering, National Chiao Tung University 75 Po-Ai Street, Hsinchu, Taiwan, ROC
 Research interests: Use of waste products (sewage sludge, manure, and household waste) as fertilizer in future.
 Characterization of waste products applied to farmland.
 Determination and speciation of organic micropollutants (nonylphenol, di(2-ethylhexyl)phthalate) and heavy metals in waste products.
 Simultaneous digestion and heavy metal leaching of waste products by microbial process.
 Behaviour of micropollutants in municipal treatment plant.
 Enhancement of municipal treatment plant (activated sludge system) to minimize micropollutants in sludge.
 Improved compost for waste products for agricultural use.
 Feasibility of using ultrasonic process in the treatment of micropollutants.

20 Announced at: Jan. 25, 2003

Contact person: Jolanta Liesiene
 E-mail: jolies@ktu.lt
 Telephone: +370 37 451499
 Fax: +370 37 451582
 Institution address: Radvilenu pl. 19, LT-3028 Kaunas, Lithuania
 Research interests: (i) Cellulose chemistry and physics
 (ii) Synthesis of stationary phases for liquid chromatography of proteins. Macroporous cellulose-based matrix. Sorbents for hydrophobic interaction chromatography. Metal chelating sorbents. Bioselective sorbents for affinity chromatography.
 (iii) Application of cellulose derivatives for controlled drug delivery.

19 Announced at: Jan. 11, 2003

Contact person: Dr. Erinija Pranckeviciene

E-mail: ernagu@if.ktu.lt
 Telephone: 370 37 300372
 Fax: 370 37 300352
 Institution address: Department of Practical Informatics, Kaunas University of Technology, Studentu 50, Kaunas LT 3031, Lithuania
 Research interests: Recognition of visual objects in aerial photographs. In cooperation with the Institute of Aerogeodesy in Lithuania a suite of algorithms and programs is being developed for the automated extraction of urban areas, landmarks, forests and other definite visual objects. This will facilitate an automatic interpretation of the content of aerial photographs/images and map production directly out of the digital photograph. We are solving the problem of the comparison of the aerial photographs taken at the different times also. We want to compare our methods with others, aiming to have the joint publications. We need a methods and software for storing and fast retrieval of huge aerial photograp (50Mb).

18 Announced at: Jan. 10, 2003

Contact person: Dr. Ausra Vektariene
 E-mail: avekt@bchi.lt
 Telephone: 370-5-729195
 Fax: 370-5-729196
 Institution address: Institute of Biochemistry,
 Institute of Theoretical Physics and Astronomy,
 Mokslininku 12, 2600 Vilnius, Lithuania
 Research interests: The group of researchers at the Institute of Biochemistry and Institute of Theoretical Physics and Astronomy is mainly concerned in the fields of advanced Molecular Mechanical and Quantum Mechanical Calculations.

The results of our investigations can provide for:

- 1) Estimation and better understanding of reaction mechanisms of organic molecules regarded as the sequence of elementary steps that connect reactants and products through several stationary points (minima and transition states) along the potential energy surface;
- 2) Elucidation of the substitution effects, internal and external fields effect on the physical and chemical properties of organic molecules;
- 3) Interpretation of the interaction in H-bonded or van der Waals complexes;
- 4) Estimation of the conformational behaviour for the organic molecules of biological and other interest;
- 5) Molecular graphics and modelling, quantum-chemical study of various organic molecules and spectroscopic techniques like NMR, IR, EPR.

Current research: Quantum chemical study of electrophilic substitution bromination and nitration reaction for substituted tetrahydro-1,5-benzodiazepinones.

Quantum chemical estimation of regioselective electrophilic addition AE2 reaction of sulphelylchlorides to substituted alkenes.

N-Acyl Substitution Effects on Reactivity of N-Acyl 2-amino-2-desoxyglucopyranoses. Quantum Chemical Study. For more info.: Fourth International Electronic Conference on Synthesis Organic Chemistry (ECSOC-4), www.mdpi.org/ecsoc-4.htm, September 1-30,2000, A0046 // Molecules. 2000 n. 5, p. 1399-1407

We are open for collaboration solving problems of your interest performing various modern quantum chemical, molecular mechanics, molecular dynamics methods and high-level computational works.

17 Announced at: Jan. 7, 2003

Contact person: GRUBE Mara
 E-mail: grube@lanet.lv
 Telephone: + 371 9737872
 Fax: + 371 703 4885
 Institution address: Institute of microbiology & Biotechnology
 University of Latvia
 4 Kronvalda blvd.
 LV 1586 Riga
 Latvia
 Research interests: Application of Infrared spectroscopy methods in biology and biotechnology: qualitative and quantitative studies of microorganisms belonging to various taxonomic groups, microbial biomass, principal cell components, storage substances, screening of producers, fermentation process monitoring and optimization, etc.
 Qualitative and quantitative analyses of food products, grain, mushrooms, etc. Functional food products.

16 Contact person: Petras Kaltenis
 E-mail: petras.kaltenis@mf.vu.lt
 Telephone: +370-2-720368
 Fax: +370-2-720368
 Institution address: Vilnius University Children's Hospital
 Santariskiu 4, 2600 Vilnius, Lithuania
 Research interests: 1. Urinary tract infections in children: causative agents, their susceptibilities to antibiotics, optimal methods of treatment and long-term prophylaxis.
 2. Glomerulonephritis in children: predisposing factors, clinical and morphological forms, search for new treatment modalities.
 3. Carriage of respiratory pathogens in children: their

-
- 15** Contact person: Ait Hsine El Houcine
E-mail: aithsine@ucam.ac.ma
Telephone: 212 (0) 64 06 08 05
Fax:
Institution address: Faculty of science, PB 2390, Laboratory of automatic marrakech-morocco
Research interests: wastewater treatment of soft drink lake coca-cola by activated sludge system thank
-
- 14** Contact person: Young, Ku
E-mail: D8706002@mail.ntust.edu.tw
Telephone: +886 2 27376621
Fax: +886 2 23785535
Institution address: Dept. Chem. Eng. No.43, Sec. 4, Rd. Keelung, Taipei, Taiwan
Research interests: Development of advanced oxidation technology (AOTs) included Ozone process, UV/TiO2 process, UV/H2O2 process and sonolysis process etc. for treating wastewater and air pollutants is an objective of our research. Photoreactor design and immobilized of photocatalyst on specific support are focused on and the behavior of UV light delivery in the photoreactor is also considered. Combination of various AOTs will be evaluated in the future and efficiency of pollutant removal in the photoreactor can be modeled and improved.
-
- 13** Contact person: Algirdas Miskinis
E-mail: algmis@takas.lt
Telephone: +370 2 366 136
Fax: +370 2 366 127
Institution address: Faculty of Economics, Vilnius University, Sauletekio 9, 2040 Vilnius, Lithuania
Research interests: Summary of research proposal.
Development of economic co-operation between Taiwan and Baltic Countries (Latvia, Lithuania).
Trade development opportunities between Baltic countries and Taiwan.
Taiwanese investment opportunities in the Baltic countries.
Tools for the facilitation of trade and investment development.
Identification of partners and assistance in the implementation of production co-operation (investment) project.
-
- 12** Contact person: Dr. Rimantas Jankauskas, Assoc. Prof.
E-mail: rimantas.jankauskas@mf.vu.lt
Telephone: (+370 2) 651764
Fax: (+370 2) 263167
Institution address: Department of Anatomy, Histology and Anthropology, Faculty of Medicine, Vilnius University, Ciurlionio 21, Vilnius LT2009, Lithuania
Research interests: Bioarchaeology of past populations:
Research on patterns of human growth, human body build variability, paleodemography, paleopathology, paleoepidemiology and paleoecology of past populations from Mesolithic till Early Industrialisation. Human adaptability and plasticity to changing abiotic, biotic and cultural environments in prehistory and historical periods based on human skeletal materials derived from archaeological excavations.
-
- 11** Contact person: Giedre Beconyte
E-mail: giedre.beconyte@gf.vu.lt
Telephone: +370 2 233502
Fax: +370 2 331189
Institution address: Center for cartography, Vilnius university, M.K.Ciurlionio 21/27 LT-2009 Vilnius, Lithuania
Research interests: Theoretical and thematic cartography, cartography of socio-historical phenomena, maps' quality and design problems, methodological aspects of national atlases, electronic maps and atlases, information management in large cartographic projects.
-
- 10** Contact person: Petras Musteikis
E-mail: petras.musteikis@gf.vu.lt
Telephone: +370 2 233748
Fax: +370 2 333844
Institution address: Geology & Mineralogy Department, Vilnius University, Ciurlionio 21, LT 2009, Vilnius, Lithuania
Research interests: -Silurian brachiopod, graptolite and conodont taxonomy, palaeoecology, stratigraphy, palaeogeography
-paleobasins modelling, geological data base, GIS
-Silurian geochemistry
-
- 9** Contact person: Assoc.Prof., Dr.Biomed.Sci. Osvaldas Ruksenas
E-mail: osvaldas.ruksenas@gf.vu.lt
Telephone: +3708745546
Fax: +3702 235049
Institution address: Dept. Biochemistry-Biophysics, Faculty of Natural Sciences, Vilnius University, Ciurlionio 21, LT-2009 Vilnius, LITHUANIA
Research interests: - processing of visual information at different levels of the brain-antagonism of receptive field center/surround and analysis of temporal pattern of neuronal responses;
- lateralisation of cognitive functions - perceptual processing of

facial emotional expressions and low spatial frequencies- in healthy humans and schizophrenic patients;
 - interaction of attention and capacity of short-term visual memory;
 - psychophysiological correlates of organism (human) response to mental and physiological stressors with respect to gender, smoking, physical training;
 - influence of different image properties on recognition efficiency;
 - encoding principles of visual features in the short-term and long-term memory.

8 Contact person: Juozas Vidas Grazulevicius
 E-mail: juogra@ctf.ktu.lt
 Telephone: +3707 456525
 Fax: +3707 456525
 Institution address: Kaunas University of Technology, Department of Organic Technology, Radvilenu Plentas 19, 3028 Kaunas, Lithuania
 Research interests: (1) Synthesis of photoconductive and charge transporting polymers and molecular glasses for the potential application in electrophotography and light-emitting diodes.
 (2) Cationic photopolymerization of oxiranes, thiiranes and vinyl ethers.

7 Contact person: Dr.sc.ing. Andris Chate
 E-mail: and_cate@latnet.lv
 Telephone: +371 7089264
 Fax: +371 7089235
 Institution address: Institutu of Computer Analysis of Structures Riga Technical University Kalku str.1, LV-1658, Riga, LATVIA
 Research interests: Modelling and design of composite materials and lightweight structures

In the Institute of Computer Analysis of Structures (Prof. Rolands Rikards) at Riga Technical University the methods and software for analysis and design of composite/sandwich materials and structures have been developed. These methods and software can be applied for the solution of design problems of lightweight structures made from advanced composite materials. The investigations can be performed in the following directions:

1) Finite element analysis of sandwich and laminated composite structures – static, vibrations, damping and impact
 This direction is connected with the finite element analysis of composite/sandwich structures under static and dynamic loading. For solution of such problems the special finite elements of beams, plates and shells were developed. Appropriate models to take into account the damping in the polymeric layers were developed. The following damping models are examined: viscous and viscoelastic (hysteretic), structural and external. Frequency dependent damping properties of material can be analyzed. Modal loss factors of structure, the damped vibrations and behavior of laminated/sandwich structures under impact loading can be considered

2) Optimal design of composite materials and structures
 For solution of such problems a techniques from experimental design and response surface methodology can be applied. This approach was successfully used for the minimum weight design laminated/sandwich structures and the design composite materials (for example, composites with recycled particles). In this approach information about the object is obtained in the reference points of experimental design. Information can be obtained by the physical experiments or by modeling using the finite element method. After these approximate models or the so-called response surfaces are built only the data in reference points. Then these approximate models are used in the design with selected criterion (minimum weight, maximum stiffness, etc).

3) Fracture analysis of delamination in laminated composites
 This direction is connected with the numerical modelling of delamination process in laminated composites under mixed mode fracture conditions.

4) Identification of mechanical properties/damage of laminated composites
 The numerical-experimental method for identification of mechanical properties/damage of laminated composites from the experimental (free vibration tests) results and elastic/plastic properties of polymers (microhardness tests) were developed. For solution of such problems a numerical-experimental method based on experimental design and response surface methodology is developed. The method can be qualified also as a non-destructive method of testing since the properties of material are determined directly from the response of structure.

6 Contact person: Prof. Dr.h.sc.ing. Peteris SHIPKOVŠ
 E-mail: shipkovs@edi.lv
 Telephone: +371 7553537 or +371 7558620
 Fax: +371 7553537
 Institution address: Institute of Physical Energetics Latvian Academy of Sciences, Aizkraukles street 21, LV-1006, RIGA, LATVIA
 Research interests: Sustainable development of the energy sector on the energy efficiency, increased use of renewable energy resources and an innovative solar electric power system bases.
 The project includes proposal for co-operation in energy efficiency and increased use of renewable energy resources, innovative solar electric power systems.
 Evaluations of the energy supply systems not only for traditional

energy resources but also in combination with renewable energy resources and especially biomass. Economical and customers aspects of the renewable energy use in liberalised energy market. Financial mechanisms for increased and efficient use of renewable energy resources - wind, solar, PV, etc., . Ecologically sustainable development in the energy sector through energy efficiency, increased role of cogeneration and use of renewable fuels in accordance with the related GHG emissions are also the tasks of the Project.

-
- 5** Contact person: Hung Mao-hsiung
 E-mail: 0920chen@kimo.com.tw
 Telephone: +886 2 29340023
 Fax: +886 2 29378603
 Institution address: 64,Wan Shou Road, Mucha, Taipei 116 ,Taiwan
 Research interests: Areas studies: The Baltic countries' foreign relations in the post-Soviet era.By the research of the foreign relations between the Baltic countries, people in Taiwan can understand the latest situation, how they development under the power of their neighbor, Russia, and promote the understanding to one another
-
- 4** Contact person: Jih-Gaw Lin
 E-mail: jglin@cc.nctu.edu.tw
 Telephone: +886 3 5722681
 Fax: +886 3 5725958
 Institution address: Institute of Environmental Engineering, National Chiao Tung University 75 Po-Ai Street, Hsinchu, Taiwan, ROC
 Research interests: Use of waste products (sewage sludge, manure, and household waste) as fertilizer in future.
 Characterization of waste products applied to farmland.
 Determination and speciation of organic micropollutants (nonylphenol, di(2-ethylhexyl)phthalate) and heavy metals in waste products.
 Simultaneous digestion and heavy metal leaching of waste products by microbial process.
 Behaviour of micropollutants in municipal treatment plant.
 Enhancement of municipal treatment plant (activated sludge system) to minimize micropollutants in sludge.
 Improved compost for waste products for agricultural use.
 Feasibility of using ultrasonic process in the treatment of micropollutants.
-
- 3** Contact person: Shinn-Wen Wang
 E-mail: shinwen@mail.lhit.edu.tw
 Telephone: +886 2 82093211~620
 Fax: +886 2 82093211~620
 Institution address: 300, Wan-Shou Rd., Sec. 1, ueishan, Taouyuan, Taiwan, R.O.C., 333
-
- 2** Contact person: Arturas Zukauskas
 E-mail: arturas.zukauskas@ff.vu.lt
 Telephone: +370 2 336022
 Fax: +370 2 336022
 Institution address: Institute of Materials Science and Applied Research, Vilnius University Naugarduko 24, LT-2006, Vilnius, Lithuania
 Research interests: Characterization of semiconductor light emitting structures based on group-III nitrides by means of photoluminescence, photoluminescence excitation, time-resolved luminescence, and nonlinear optical methods.
 Investigation of carrier relaxation and recombination processes in III-N materials.
 High-brightness light emitting diodes based on III-V and II-VI materials.
- 1** Contact person: Dalia Streimikiene
 E-mail: dalia@isag.lei.lt
 Telephone: +370 7 453550
 Fax: +370 7 351271
 Institution address: Lithuanian energy institute, Breslaujos 3, LT-3035, Kaunas, Lithuania
 Research interests: Extended cost-benefit analysis for decisionmaking on investment projects in energy sector.
 Extended cost-benefit analysis for decision making on investment projects in energy sector.
 The aim of the joint research project is to evaluate external costs of electricity generation using different fuels and technologies and to provide with reliable environmental impact estimates for the extended economic analysis on investment projects. The results of the study will serve for the promotion of renewable energy utilisation projects in Lithuania, Latvia and Taiwan.
-

CONSORTIUM SEEKS PARTNER

-
- 9 Announced at: 2013 04 17**
 Contact person: Dr.habil.chem. Edgars Abele
 E-mail: abele@osi.lv
 Telephone: (371) 7551822
 Fax: (371) 7551822
 Institution address: www.lza.lv/scientists/abeleE.htm

Latvian Institute of Organic Synthesis 21 Aizkraukles Street LV-

Research interests: Organic chemistry

- Metal complex catalytic synthesis
- Phase transfer catalysis
- Synthesis of biologically active polycyclic heterocyclic systems using metal complex catalysis
- Synthesis of heterocyclic systems using "green" chemical methods
- Synthesis of biologically active compounds (oxime derivatives, amino acids, polycyclic heterocycles, silane derivatives etc.)

Research proposal: Catalytic synthesis of biologically active heterocyclic systems using „green" chemical methods.

8 Announced at: May 23, 2006

Contact person: Robert Bunn
 E-mail: robertbunn@syschem.com
 Telephone: 13034592346
 Fax:

Institution address: www.syschem.com located in Coeur d'Alene, ID USA

Research interests: SysChem has recently completed new software capable of developing many viable organic syntheses without any human intervention whatsoever. All we need is an image of the molecule and the results are sent back with our free viewer software for our customer to analyze at their convenience.

7 Announced at: Dec. 19, 2005

Contact person: Hsing-Wen Wang
 E-mail: shinwen@cc.ncue.edu.tw
 Telephone: 886-4-7232105 ext.7340
 Fax: 886-4-7211162

Institution address: No. 2, Shi-Da Rd., Changhua 500, Taiwan, R.O.C.

Research interests: - Financial Engineering
 - Database Marketing
 - Business Intelligence
 - Artificial Intelligence
 - Supply Chains Management
 - Information Management
 - Computers and Education
 - Electronical Engineering
 - Estimation of 1/f noise
 - Technology Management
 - Patern Analysis and Intellectual Property management Law

6 Announced at: Aug. 28, 2003

Contact person: Marcis Leja
 E-mail: cei@latnet.lv
 Telephone: +371-9497500
 Fax: +371-7040248

Institution address: Digestive Diseases Centre GASTRO Hospital LINEZERS
6 Linezera iela, LV 1006 Riga, Latvia

Research interests: 1) Helicobacter pylori, atrophic gastritis and related gastric cancer studies, including epidemiology studies
 2) Liver breath test applications in gastroenterology, hepatology and oncology (including in patients undergoing chemotherapy)

5 Announced at: June 24, 2003

Contact person: Mehdi Ghaffari
 E-mail: meghaffari@yahoo.co.uk
 Telephone: ++984612233158
 Fax: ++984612233159

Institution address: Agricultural Research Center of West Azarbaijan
p.o.box:363, Uromieh, Iran

Research interests: 1 - sunflower hybrid production
 2 - new cms and fertility restoring systems

4 Announced at: Jan. 7, 2003

Contact person: Dr. J. Tamuliene
 E-mail: gicevic@itpa.lt
 Telephone: 370-5-2620861
 Fax: 370-5-2125361

Institution address: Vilnius university, Institute of Theoretical Physics and Astronomy,
A. Gostauto 12, 2600 Vilnius, Lithuania

Research interests: Quantum mechanical ab initio and DFT-Time Dependent designed light-driven, single supermolecular devices based on fullerene, biliverdin and photoactive molecules and supermolecules could form the basis for logically-controlled organic molecular machines and molecular classical and quantum computers. Organic and organo-metallic molecular computers have advances in nano-size and pico- or even femto-second speed. The results of our investigations can provide the basic understanding needed to design single supermolecule devices. The geometry structures of various molecular derivatives, quantum state energies, electron and proton charge transfer, NMR, EPR, etc. are investigated. That help to design supermolecules and molecular compound with the desired quantum properties. Using advanced computational chemistry tools we, for instance, elucidated the energies and pathways of optically-induced charge transfer and the trans-cis isomerization of azo-dyes based supermolecules, and the electrical and magnetic properties of fullerene (ErSc2N@fCC12CCI2NC11C80 and a biliverdin derivatives. A

molecular logic gate of classical digital molecular machine would change its quantum state in response to optical signal and pass the emitted electron via chip doing simultaneously trans-cis isomerization that predict motion. Set of gates of classical digital molecular computers are designed based on light driven charge transfer in fullerene-containing supermolecules.

Designed basic elements of quantum computers are based on EPR estimations in endohedral fullerenes (figure on left) that possess up to six quantum bits (QuBits) and proton NMR estimations in biliverdin derivatives (figure on right) that generate up to eleven QuBits for quantum computation. It were designed various biologically active, fluorescing, small-gap semiconductor and proton-transfer switching single supermolecular devices based on biliverdin, fluorescein, CdS organic and white phosphorus organo-metallic complexes.

-
- 3** Contact person: Dr. Halim Hamid Redhwi
 E-mail: hhamid@kfupm.edu.sa
 Telephone: (966) 3 860-3840
 Fax: (966) 3 860-2259
 Institution address: King Fahd University of Petroleum & Minerals No. 1823, Dhahran 31261, Saudi Arabia
 Research interests: Petroleum Refining (Hydrocracking catalysts, FCC Process)
 Polymer degradation and Stabilization
-
- 2** Contact person: Dr.A.Viksne
 E-mail: arm@ktf.rtu.lv
 Telephone: +371-7089219
 Fax: +371-7615765
 Institution address: 1. Riga Technical University, Institute of Polymer Materials Azenes str.14/24, LV1048 Riga, Latvia 2. University of Agriculture, Kaunas, Lithuania
 Research interests: Decreasing of waste materials impact on the environment during their recycling into valuable and economically sound products. Use of the biofuel production process side product- raw glycerol - as PET waste depolymerisation agent and for the production of biolubricants and hydraulic fluid production. Chemical recycling of PET waste (soft drink bottles) by depolymerisation through alcoholysis with polyhydric alcohols. Synthesis of alkyd resins on the base of PET alcoholysis products which further were used for producing of the surface coating materials . Transesterification of different vegetable oils (rapeseed, sunflower, fat etc.) during their alcoholysis with lower alcohols to obtain alkyl esters which can be used as biofuels to substitute petroleum fuels. Investigation of the composition of side products of that process and their application possibilities
- 1** Contact person: Vaidotas Kazukauskas
 E-mail: vaidas@che.nthu.edu.tw
 Telephone: +886-3-5715131-3690
 Fax: +886-3-5710733
 Institution address: 1. Semiconductor Physics Department of Vilnius University, Sauletekio al. 9, bldg. 3, LT-2040 Vilnius, Lithuania
 2. Chemical Engineering Department National Tsing Hua University, Hsinchu, Taiwan
 Research interests: Investigation of fundamental properties and optimization of material structure and physical characteristics of high intensity, wide spectral region and low cost polymer light emitting materials. The main goals are analysis, modification and optimization of polymer light emitting device parameters in order to assure their wide commercialization. The project foresees investigation of structural, electro-optical and thermo-physical properties of poly(phenylene vinylene) (PPV)-based and other promising copolymers. The complex approach aims to fully understand, model and improve control of the charge injection, transfer and light generation processes depending on polymer structure, defects and fabrication procedure. As a result, reproducibility, stability in time, quantum efficiency and variability of the spectral region of polymer light emitting diodes are to be enhanced, which are of vital importance for the wide commercialization.
-