

	<b>SCIENTIFIC, INDUSTRIAL AND APPLIED RESEARCH</b>	<b>CONTACT PERSON</b>
1.	Chemical analysis in solutions and other objects: • metals including heavy and precious metals; • inorganic anions; • total organic carbon (TOC); • polycyclic aromatic hydrocarbons (PAH); • polychlorinated biphenyls (PCB); • petroleum hydrocarbons; • characterization of waste delivered to dumps. NMR, UV and Raman spectroscopic analysis of organic compounds (qualitative and quantitative determination of compounds for certification).	<b>Jūratė VAIČIŪNIENĖ</b> +370 5 2648893, jurate@chi.lt <b>Rita BUTKIENĖ</b> +370 5 2648841, rita.butkiene@chi.lt <b>Olegas EICHER-LORKA</b> +370 5 2729372, lorka@ktl.mii.lt
2.	Electrodeposition of metals (including precious metals) and their alloys coatings;	<b>Romas RAGAUSKAS</b> +370 698 29863, chieb@chi.lt
3.	Evaluation of dimensionally stable electrodes and their application possibilities.	<b>Benjamins ŠEBEKA</b> +370 5 2665796, sebeka@chi.lt
4.	Testing of product compliance with RoHS requirements, determination of quantities of hazardous elements by X-ray fluorescence spectroscopy. An examination of elemental and phase composition of solid state materials (metals, alloys, rocks, minerals, soil, salts, plastics) by X-ray diffraction (XRD) and X-ray fluorescence spectroscopy (XRF-WD).	<b>Remigijus JUŠKĖNAS</b> +370 5 2648881, juskenas@chi.lt
5.	An examination of surface morphology, local elemental composition of solid state materials by scanning electron microscope and microprobe analysis.	<b>Algirdas SELSKIS</b> +370 5 2649772, aselskis@ktl.mii.lt
6.	Cutting, polishing, cross-sectioning of solid material samples using special equipment (Struers Tegramin-25) and examination the prepared samples by optical and scanning electron microscopes.	<b>Aušra SELSKIENĖ</b> +370 5 2649772, ausra@chi.lt
7.	Preliminary evaluation of automotive and industrial lubricant technologies, friction and wear problems, solution of technological problems; Determination of kinematic and dynamic viscosities of homogeneous fluids, calculation of Viscosity Index, determination of melting/cloud point temperatures.	<b>Svajus ASADAUSKAS</b> +370 5 2649360, asadauskas@chi.lt
8.	Evaluation of corrosion resistance of materials in accredited Corrosion testing laboratory.	<b>Algirdas NARKEVIČIUS</b> +370 5 2729388, narkeval@chi.lt
9.	Expertise on corrosion damage of products and objects. Evaluation of microbiological damage of food and non-food materials in various stages of raw material preparation, storage, processing and manufacturing.	<b>Rimantas RAMANAUSKAS</b> +370 5 2648844, ramanr@ktl.mii.lt
10.	Consulting on metals corrosion in electrolytes (aqueous solutions) and atmosphere.	<b>Konstantinas LEINARTAS</b> +370 5 2661290, leinart@ktl.mii.lt
11.	Metallization of plastics and dielectrics	<b>Leonas NARUŠKEVIČIUS</b> +370 5 2729350
12.	Formation of thin coatings by dc/rf magnetron-sputtering method. Choice of coating composition and formation conditions; test coating of samples.	<b>Povilas MIEČINSKAS</b> +370 5 2648880, mpovilas@ktl.mii.lt <b>Konstantinas LEINARTAS</b> +370 5 2661290, leinart@ktl.mii.lt
13.	Determination of coating thickness. Measurement of coating microhardness and surface roughness. Evaluation of coating adhesion.	<b>Gedvidas BIKULČIUS</b> +370 5 2729363, gbikulcius@chi.lt
14.	Custom synthesis of organic compounds. Custom research and development of technologies in organic chemistry.	<b>Linas LABANAUSKAS</b> +370 5 2729649, labanauskas.linas@gmail.com
15.	Anodizing and colouring of aluminum and Al alloys.	<b>Sigitas JANKAUSKAS</b> +370 5 2729388 <b>Arūnas JAGMINAS</b> +370 5 2648891, jagmin@ktl.mii.lt
16.	Advices in the field of environmental chemistry.	<b>Tomas VENGRIS</b> +370 5 2729381, tvengris@chi.lt
17.	Investigation of optical components spectral properties and their stability.	<b>Rytis BUZELIS</b> +370 687 22316, rbuzelis@ktl.mii.lt
18.	Optimization of deposition processes in order to achieve excellent spectral and physical properties of optical coatings	<b>Ramutis DRAZDYS</b> +370 685 24180, rdrazdys@ktl.mii.lt
19.	Optical and laser devices; lidars; photometers; sugarmeters. Industrial laser applications (chemistry, furniture, paper, food, advertisement, etc). Spectrometric test of solar cells. Usage of renewable energy resources in buildings. Freezing point measurement methods and techniques. RGB lasers and laser projectors for advertisement, construction, textile, furniture. Features of materials thin films; kinetics of chemical reactions on surface. Techniques for supersensitive test of thin films; plasmon-analysers for chemical and biotechnology industry.	<b>Viktoras VAIČIKAUSKAS</b> +370 699 61327, vikvai@ktl.mii.lt
20.	Development of the portable method and apparatus Evaluation of drinking water, living environments and workplaces with respect to ambient mercury (Hg) pollution. Development of the method and apparatus for the ambient mercury speciation in the atmospheric environment.	<b>Kęstutis KVIETKUS</b> +370 698 25139, kvietkus@ktl.mii.lt

21.	<p>Elemental and isotopic analysis:</p> <ul style="list-style-type: none"> <li>• in solid, liquid and gaseous samples; • in samples of biological, natural and anthropogenic origin.</li> </ul> <p>Modeling:</p> <ul style="list-style-type: none"> <li>• dispersion of atmospheric pollutants; • meteorological parameters in micro and macro environment.</li> </ul> <p>Diagnostic:</p> <ul style="list-style-type: none"> <li>• identification of atmospheric pollution sources; • identification of physical and chemical properties of atmospheric pollution sources;</li> <li>• measurement and evaluation of emission from sources of natural and anthropogenic origin.</li> </ul>	<p><b>Darius VALIULIS</b> +370 612 93023, valiulis@ar.fi.lt</p>
22.	<p>Air filter material testing. Clean room testing. Environmental impact assessment. Air pollutants emission assessment.</p>	<p><b>Vidmantas ULEVIČIUS</b> +370 5 2661644, ulevicv@ktl.mii.lt</p>
23.	<p>Safe operation assurance of the nuclear facilities and objects. Evaluation of the impact on the environment and population. Preparation of the EIA reports; Preparation and/or expertise of the documentation on radiation safety.</p>	<p><b>Evaldas MACEIKA</b> +370 650 46440, emaceika@ar.fi.lt</p>
24.	<p>Determination of radionuclide activity concentration in various samples. Industrial development of non-destructive and destructive analysis methods for radionuclide activity determination. Calibration and verification of alpha-spectrometers, beta-counters, liquid scintillation counters, gamma-spectrometers. Calibration and verification of radionuclide calibrators used in nuclear medicine.</p>	<p><b>Arūnas GUDELIS</b> +370 5 266 1643; +370 670 60707, gudelis@ktl.mii.lt</p>
25.	<p>Studies of iron compounds (steel, oxides, amorphous compounds and etc.) for determination magnetic, corrosive properties using Mössbauer spectroscopy. Mechanochemical alloying and milling.</p>	<p><b>Kęstutis MAŽEIKA</b> +370 5 2661657, kestas@ar.fi.lt</p>
26.	<p>Evaluation of the radionuclide activity concentration in environmental samples and food. Preparation of the methods of the radiochemical analysis and their application.</p>	<p><b>Rūta DRUTEIKIENĖ</b> +370 5 2644854, ruta@ar.fi.lt</p>
27.	<p>Evaluation of TENORM, technologically enhanced naturally occurring radioactive materials, (<sup>238</sup>U daughter products), in the area of non-nuclear industry objects. Application of radiochemical, physical methods and modeling</p>	<p><b>Benedikta LUKŠIENĖ</b> +370 5 2644857, bona@ar.fi.lt</p>
28.	<p>Determination of the phase composition of different tin compounds (including amorphous state) by nuclear gamma resonance.</p>	<p><b>Dalis BALTRŪNAS</b> +370 5 2661657, dalis@ar.fi.lt</p>
29.	<p>The digestive tract diseases diagnostics using stable isotopes. Use of stable isotope ratio mass spectrometry for digestive diseases diagnostics. Method development for the detection of adulteration of the foodstuff.</p>	<p><b>Andrius GARBARAS</b> +370 5 2661640, garbaras@ar.fi.lt</p>
30.	<p>Calibration (in the cells) of platinum resistance thermometers and thermoelectric thermometers (thermocouples) against the primary standard at the following reference points: 0.01 °C, 29.765 °C 38.8344 °C, 231.928 °C, 419.527 °C, 660.323 °C, 961.78 °C, and 1084.62 °C. Calibration of platinum resistance thermometers against the secondary standard in the temperature range from -200 °C to 962 °C. Calibration of thermometers, furnaces (blocks) and digital thermometers with resistive sensors. Calibration and comparison of the following cells: water triple point, zinc, tin, aluminum, silver, and copper.</p>	<p><b>Kazys MIKALAIŠKAS</b> +370 5 2626736, mik@pfi.lt</p>
31.	<p>Investigation of metrological properties of electrical standards and measurement instruments</p>	<p><b>Gintautas AMBRAZEVIČIUS</b> +370 69985496, ambra@pfi.lt</p>
32.	<p>Investigation of metrological characteristics of devices for measurement of time and frequency. Design and implementation of methods for measurement of time and frequency. Investigation of uncertainties and phase noise in transfer of time and synchronization over telecommunication channels. Radijo dažnių generatorių stabilumo tyrimai. Investigation of stability of radio frequency oscillators.</p>	<p><b>Rimantas MIŠKINIS</b> 8 687 80333, miskinis@pfi.lt</p>
33.	<p>Elemental analysis of various objects and organic compounds, qualitative and quantitative determination; Reference methods for chemical measurements, their performance analysis and optimization; Chemical measurements of quality and accuracy of research opportunities for improvement.</p>	<p><b>Evaldas NAUJALIS</b> +370 5 2612758, naujalis@pfi.lt</p>

34.	Investigation of the influence of high power microwave pulses to the behaviour of different objects in S (2,6 GHz), C (5,2 GHz), X (9.3 GHz), Ku (15 GHz), Ka (34 GHz), W (93 GHz) bands. In the parenthesis the frequency of available microwave sources is denoted. Calculation of the components of electromagnetic field in various objects illuminated by electromagnetic radiation using finite-difference time-domain method. Measurement of high power microwave pulse in different transmission lines and free space. Development and manufacturing of the sensors for high power microwave pulse measurement by technical requirements of the customers.	<b>Žilvinas KANCLERIS</b> +370 5 2619808, +370 655 26156 kancleris@pfi.lt
35.	Development of frequency converter prototypes with special features for AC induction motor speed control. Development of microcontroller-based electronic devices prototypes.	<b>Algirdas BAŠKYS</b> +370 5 2613989, mel@pfi.lt
36.	Formation of silicon dioxide coatings by sol-gel technique and their optical characterization. Optimization of technological procedures for optical coating on hygroscopic substrates providing perfect physical and spectral characteristics. Formation of protective and antireflective coatings at low annealing temperature (<300°C). Fabrication and characterization of doped glasses used for diffusion of impurities into semiconductors. Implementation of common diffusants for solar cell technology. Formation and characterization of porous silicon oxide layers. Development of micro- and nano-structure formation technology suitable for sensor and catalyst manufacturing. Formation and characterization of porous silicon antireflective coatings. Increase of efficiency of c-Si solar cells.	<b>Irena ŠIMKIENĖ</b> +370 5 2626737, irena@pfi.lt
37.	Development of thin film technology suitable for high sensitivity, tuneable selectivity and low power consumption gas sensors manufacturing. Development of metal and metal oxide based technologies for multilayer structures suitable for manufacturing of nanoscaled films. Development and application of systems for detection, featuring and identification of surrounding gases, mixtures of volatile compounds and odours. Development, tuning and application of systems and methods for gas sensor testing and calibration. Development and application of systems for detection, featuring and identification of surrounding gases, mixtures of volatile compounds and odours. Development and application of prototype systems based on multichannel electronic signal input/output modules for monitoring and controlling of processes characterised by the key volatile compounds.	<b>Arūnas ŠETKUS</b> +370 5 2627934, setkus@pfi.lt
38.	Studies of transparent and absorbing multi-layer structures/coatings by optical ellipsometric methods	<b>Gintautas Jurgis BABONAS</b> +370 5 2619402, jgb@pfi.lt
39.	Studies of magneto-optical and piezo-optical systems	<b>Alfonsas Rėza</b> +370 5 2619475, alfa@pfi.lt
40.	Gloss investigations of coatings and bulk material surfaces	<b>Bronislovas ČECHAVIČIUS</b> +370 5 2619475, bronius@pfi.lt
41.	Optical response (reflection) modelling of multilayer optical coatings	<b>Saulius TUMĖNAS</b> +370 5 2619475, tumenas@pfi.lt
42.	Investigation of the nanometric particle dynamics. Design and production of the apparatus for the nanometric particle generation, separation and registration.	<b>Genrik MORDAS</b> +370 601 14016, genrik@ymail.com
43.	The evaluation of ozone level and its distribution in the different environment	<b>Raselė GIRGŽDIENĖ</b> +370 5 2644859, raseleg@ktl.mii.lt