

The Technology Transfer Seminar on Advanced Computing for Innovation - Industrial Applications ([http://www.iict.bas.bg/acomin/news/14-15-May-2015\\_TTSeminar.pdf](http://www.iict.bas.bg/acomin/news/14-15-May-2015_TTSeminar.pdf)) was organized as associated event to the 23<sup>rd</sup> International Symposium on Control of Power Plants, Industrial and Ecological Systems in Hotel Bankya Palace, Bankya, Bulgaria, during the period 14-15 May 2015.

The Technology Transfer Seminar held, allowed us for presenting original results from AComIn project granted research cases. It also let us get in contact with colleagues working in the sphere of power generation, mining and processing industry as well as such from the technical universities in the country. The other accent of our presentation was to expose the possibility of collaboration in using the equipment purchased under the AComIn project grants, aiming an extension of the unique IICT equipment user's society. The separate research teams presented the achieved results in two included in the scientific program sessions.

There were 66 workshop participants, among them 24 under age of 35. The presented by us original results, directed to support cases of industrial tasks were in different spheres of interest. The presentations were considering the following areas - mapping of acoustic noise and microwave radiation, acoustic fields reconstruction, research of moving and interaction between spheroidal tetrahedrons in ball mills, high speed briquetting of metal waste using rocket engine, inspection and observation using infrared thermal camera by service mobile robots, determination of particle size distribution and analysis of a natural food supplement with prophylactic action, determination of particle size distribution and analysis of a healthy functional food, industrial transport optimization through multigraphs, inference control system for the flame position in the combustion chamber of power plant system, robust stability analysis of perturbed single area power system model. All presented results were obtained by using the unique equipment purchased under the grants of the AComIn Project.

As a result of the conversions held, new specific opportunities for future collaboration with colleagues from the University of Forestry in Sofia (<http://www.ltu.bg/a/nav/university>) were considered. We got in contact and established connection and plans for future collaboration with business partners like Rittal Ltd. (<http://www.rittal.bg>), Honeywell Bulgaria (<http://honeywell.com/worldwide/Pages/bulgaria-bg.aspx>), Trapen Ltd. (<http://www.trapen.com>) and SAT Ltd. (<http://www.satbg.com/>).

For more than 90 years now, the University of Forestry in Sofia has been the only university in Bulgaria providing education in forestry, forest management, landscape architecture and wood processing. In the 1990's, the range of scientific fields was expanded to include ecology, agronomy, veterinary medicine and business management. The University is a leading training and research center in the field of management and sustainable use of natural resources.

Honeywell is a Fortune 100 company. As part of the company's global structure, in the recent years the Bulgarian branch develops also as a System Integration Center producing system solutions for the other European branches. Each of the business directions of the Bulgarian industry (Process solutions, Home and Building Automation, HVAC, Gas and water supply installations, Sensors and Control) has a high degree of independence making use of all benefits Honeywell is an international company. Honeywell Bulgaria has successfully developed and commissioned system solutions for the biggest national companies as: Maritsa East 2 TPP, Lukoil Bulgaria, TPP Bobov Dol, Neochim, Agropolychim, Deven, Solvay Sodi and etc.

Rittal Ltd. was established in 2008 as a natural extension of the existing Ritbul Ltd. activities related to this brand and aiming an expansion on the fast developing market in the region. The production of the German company Rittal GmbH - FRIEDHELM LOH GROUP,

is well known worldwide with the huge product and accessories variety, as well as its high guaranteed and certified quality.

The different kind of cabinets and constructions for inbuilt devices, control and communication equipment are well known and used by companies like Siemens, Honeywell, Emerson, IBM and HP. With its new policy in Bulgaria the Rittal Ltd. aims to increase the service quality and activities.

The Rittal controls and coordinates the related to the advertising and marketing activities, the relations and partnership on the territory of republic of Bulgaria. To satisfy the clients requirements Rittal Ltd. provides engineering, technical and project consultations, project execution audit in the fields of communication, industry and energetic.

The Trapen Ltd. is small innovative company established in 1991 year from the former research coworkers of the Central scientific institute for complex automation (CNICA) - Sofia. The company performs scientific research, experimental and manufacturing activities in the field of technological processes and automation: dosage and mixing of raw materials, wet and dry grinding of materials and ores, measuring and control of filling level, density and viscosity, measuring, diagnostics and control of vibration processes, measuring and control of linear axis displacements In 2001 the system MILLCONT of the Trapen Company was awarded with silver medal and certificate at the International Exhibition IENA 2001 in Nürnberg (Germany) and with bronze medal and certificate at the 50th International Fair EUREKA 2001 in Brussels. The firm is awarded with honorary diploma for INOVATIVE FIRM OF THE YEAR 2005. The Trapen Company works in association with some technical universities as well as with engineering firms at reconstruction and modernization of cement plants.

Systems Automation Technologies - SAT Ltd. is a private engineering company founded on 1st August 1991. SAT Ltd. is one of the legal successors of the Central Research Institute for Complex Automation of Production (CNIKA), which has been working in this field since 1970. SAT Ltd. combines the intellectual potential and long-standing experience of more than 100 highly-qualified specialists. SAT Ltd. is the founder of SAT GROUP, which unites 8 companies working in the same field. Company's all activities conform to established and operative European standards.

The SAT's main activities are Engineering, Design, Manufacturing, Programming, Training, Electrical Erection and Installation, Supervision, Testing and Commissioning of "Turn-key" Projects for Automation of various processes, departments and whole production lines. For the past 23 years SAT Ltd. has become a major Bulgarian supplier of industrial automation systems. SAT Ltd. is now considered to be the leader on the domestic market in the field of automation systems for cement, glass, concrete, forage and paper plants, metallurgy, power plants and other industries, whereas an increasing part of our product range is being exported both inside Europe and overseas.