HIGH INTENSITY ELECTRIC FIELDS LABORATORY

Contact details

<table>
<thead>
<tr>
<th>Name</th>
<th>High Intensity Electric Fields Laboratory</th>
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<tr>
<td>Acronym</td>
<td>LCEI</td>
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<tr>
<td>Site</td>
<td><a href="http://users.utcluj.ro/~lcei/index_ro.html">http://users.utcluj.ro/~lcei/index_ro.html</a></td>
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Areas of expertise

- Equipment and technologies for electrostatic separation
- Modelling of electrostatic processes
- Ozonizing technologies for liquids
- Biological effects of high intensity electric fields.
  It provides also consulting and technology transfer in these fields

Team

- Prof. Dr. Eng. Adrian Samuila
- Prof. Dr. Eng. Roman Morar
- Prof. Dr. Eng. Alexandru Iuga
- Prof. Dr. Eng. Lucien Dascalescu (Univ. Poitiers)
- Prof. Dr. Eng. Vasile Neamtu
- Assoc. Prof. Dr. Eng. Ilie Suarasan
- Assist. Dr. Eng. Sorin Budu

Representative projects

- “Researches on developing electrostatic separation technology of muscovite”, Grant CNCSIS, (2005-2006)
- “Quality Improvement of quartz sands by electrostatic separation in high intensity electric field”, Grant CNCSIS, (2005-2007)
Significant results

The most representative publications of the past 5 years:


The offer addressed to the economic environment

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<tr>
<th>Research &amp; development</th>
<th>HIEFL is equipped with installations for electrostatic separations of granular materials, unique on a national scale and competitive on an international scale: ELSEP and ILES-1 roll carrier corona-electrostatic separators, SEP-1 plate type electrostatic separator, ILES-2 and TESS free fall separators, ELSMOD roll carrier pilot separator. The list of the research equipment of HIEFL includes: regulated high-voltage supplies (0-75)kV, electromagnetic vibratory feeders for granular materials, tribocharging devices, experimental installation for liquids treatment (5 grams ozone/hour), Keithley digital electrometer, (30-100)kV resistive dividers, electrostatic kilovoltmeter, measuring sphere gaps, laboratory ozone-meter, TestPoint software, Modde -user-friendly software for the design of experiments, Superficial Charge Simulation Program.</th>
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<tr>
<td>Consulting &amp; Training</td>
<td>Fundamental and applied research by projects, grants, programs in the domains: equipment and technologies for electrostatic separation, modelling of electrostatic processes, ozonizing technologies for liquids, biological effects of electric fields. Master and Doctoral studies in Electrostatics. Research and Development of experimental devices and industrial equipment using high-intensity electric fields. Promotion of new technologies in high intensity electric fields and orientation of research to medium and long term needs of the society. Scientific cooperation &amp; integration in European Research Area. Quality in university education and scientific research.</td>
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