IMMUNOELECTROPHORESIS?
LOOK AT MILES

We invite you to examine our line of equipment and reagents for qualitative IEP, counter-electrophoresis and rocket immunoelectrophoresis. Our chambers, punches and accessories feature design simplicity which translates into ease of use and durability.

While you are considering our equipment, please note that we offer the stains, buffers and agarose used in immunoelectrophoresis techniques.

Miles also offers a very broad line of immunochemicals, including precipitating antisera to many animal and human proteins.

If you want a closer look at our immunoelectrophoresis products, call or write for our illustrated catalog.

Miles Laboratories, Inc.
Elkhart, Ind. 46514
Phone: 219-264-8554

Miles Laboratories Ltd.
Post Office Box 37, Stoke Poges
Slough England SL2 4LY
Phone: Farnham Common 2151

Circle No. 88 on Readers' Service Card
We wish that were the case... that raising a car’s miles per gallon lowers its exhaust pollutant parts per million. But mpg and ppm don’t seesaw. They tend to move up or down together, unfortunately.

Given that tendency and a fixed pollutant limit, how do you achieve good fuel economy in an automobile engine?

Electronics engineers here at the General Motors Research Laboratories are helping close in on the answer. They’re doing it through an understanding of the dynamic interaction between spark advance (SA), air-fuel ratio (A/F), and exhaust gas recirculation (EGR) and how this affects fuel economy and emissions. Their goals have been to determine the optimum control strategies for the three variables and devise systems to implement these strategies.

By extending and applying microprocessor (minicomputer) technology and optimal control theory — the same kind of sophisticated theory used to control the descent of lunar modules — Lab engineers have:

- Produced the first on-line dynamometer system in which a computer, programmed with a mathematical optimization algorithm, automatically converges on the maximum economy point (represented at right) in a running engine within specified emission limits. It does this at speed-load points typical of federal driving schedules.
- Modified this system so that the computer makes the engine think it’s in a vehicle, then drives the “vehicle” through federal schedules.
- Developed a unique computerized test facility in a station wagon to evaluate experimental control concepts in a real-world environment.

Not exactly a giant leap for mankind. Just three of the many determined steps we’re taking on earth to push mpg up while holding ppm down.
Separate most samples in less than a minute with an Eppendorf® Micro Centrifuge.

Just as Eppendorf Micropipettes greatly simplify sample pick-up, Eppendorf Micro Centrifuges greatly simplify sample separation.

Compact and quiet-running, Eppendorf Micro Centrifuges are precision instruments that maintain constant high speed regardless of load. Because of their very high speed, these centrifuges are ideally suited for a wide variety of clinical and research applications, particularly those involving separation of heat-sensitive materials.

For maximum speed, choose Model 5412. It accepts twelve disposable Eppendorf 1.5ml test tubes in an angled rotor, or twelve 500µl, 400µl or 250µl tubes using adapters. It reaches 15,000 rpm (RCF 12,800xG) in just ten seconds, and stops in fifteen seconds.

For maximum capacity, choose Model 5413. It accepts forty 1.5ml, 400µl or 250µl tubes in four vertical carriers that each hold ten tubes horizontally. Model 5413 attains a maximum speed of 11,500 rpm (RCF 6,500xG).

Both models are equipped with automatic 15-minute timer, safety switch (prevents operation with top open) and safety lid lock (prevents opening lid while centrifuge is spinning). For literature describing Eppendorf Micro Centrifuges, test tubes, adapters and accessories, write: Eppendorf Division, Brinkmann Instruments, Inc., Cantiague Road, Westbury, N.Y. 11590. In Canada: Brinkmann Instruments (Canada), Ltd.
**GUTH HANDI-MAT®**

**Belongs In Your Lab**

- Clear durable, heavy weight polyethylene
- Easily cut to shape with shears or knife
- Protects benches and floors
- Cushions equipment
- Excellent splash protection
- Lines drawers and shelves

**FREE**

**Available From Your Leading Laboratory Supplier!**

---

**NEW ENZYMES FOR MOLECULAR BIOLOGY**

New product research at P-L Biochemicals has resulted in these often requested items to support your efforts in Molecular Biology.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNA Polymerase (T&lt;sub&gt;1&lt;/sub&gt;-infected E. coli)</td>
<td>20,000 units/mg, 70% pure</td>
<td>100 units</td>
</tr>
<tr>
<td>DNA, Nuclease Digested, Assay Reagent, Mung Bean Nuclease</td>
<td>Treated CT-DNA</td>
<td>5 vials</td>
</tr>
<tr>
<td>Polynucleotide Kinase (T&lt;sub&gt;1&lt;/sub&gt;-infected E. coli), 80% pure</td>
<td>100 units</td>
<td>$72.00</td>
</tr>
<tr>
<td>RNA Ligase (T&lt;sub&gt;1&lt;/sub&gt;-infected E. coli)</td>
<td>“RNase Free”</td>
<td>100 units</td>
</tr>
<tr>
<td>DNA Ligase (T&lt;sub&gt;1&lt;/sub&gt;-infected E. coli) Suitable for Recombining DNA</td>
<td>100 units</td>
<td>$50.00</td>
</tr>
<tr>
<td>NUCLEASE, MUNG BEAN Single-Strand specific</td>
<td>5000 units</td>
<td>$45.00</td>
</tr>
</tbody>
</table>

These products must be shipped cold, insulated container and refrigerant charge — $6.00. May require air freight shipment.