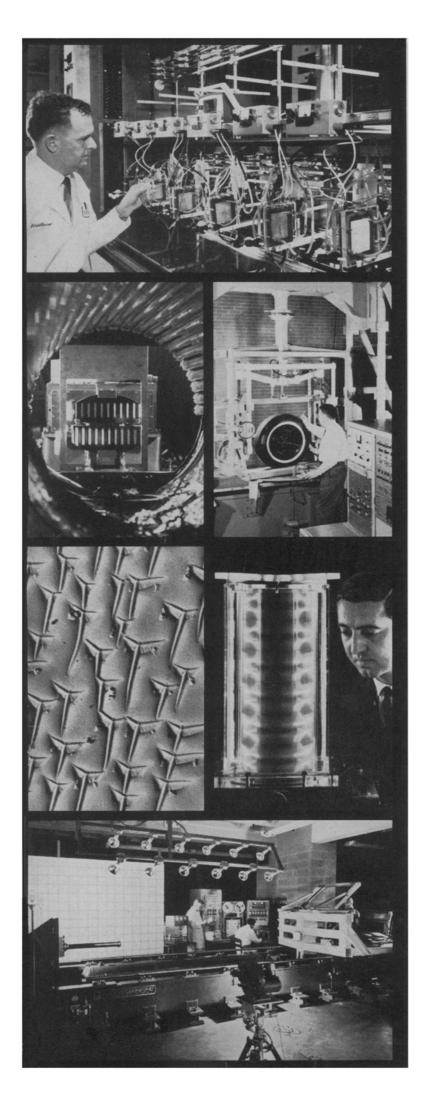
SCIENCE NEWS

SCIENCE NEWS LETTER

WEEKLY SUMMARY OF CURRENT SCIENCE

Dying Lake

SCIENCE SERVICE PUBLICATION



Our anniversary pictures came out fine, but we're still not completely happy with them.

We're in a reminiscing mood.

Just ten years ago the General Motors Technical Center was formally dedicated, became our new home. It's an inspiring campus for contemplation . . . and accomplishment.

What have we been doing this past decade? Research ranging from adhesion to x-ray diffraction—covering crystals, corrosion, computers, energy conversion ... magnetics, polymers, reliability, stress ...

Some specific accomplishments in three broad areas:

- Research on combustion reactions, vehicle emissions, emission controls, and smog chemistry. We found that one-third of the automotive hydrocarbons in the atmosphere came from crankcase vents. So we shut them off. We've developed a system for effectively decreasing the exhaust hydrocarbons too. And we've discovered which hydrocarbons are the worst offenders in smog formation.
- Traffic dynamics, vehicle handling, and driver aids. We've developed mathematical descriptions of road traffic situations, pinned down many interrelationships between car, road, and driver. Our mathematical models also describe vehicle ride, vibration, and directional control. And we've explored automatic highways and car-road communications systems as new approaches to safe, efficient travel.
- Engines. Our gas turbines now have good fuel economy, excellent engine braking, and very low hydrocarbon emissions. The quiet GMR Stirling engine is extremely efficient, with a closed cycle taking heat from almost anywhere.

We like our anniversary pictures. But they tell such a small part of our whole story.



General Motors Research Laboratories

Warren, Michigan 48090

Research on fuel cell electrodes.
Long path infrared study of smog
photochemistry; study of tire behavior.
Electron micrograph of iron whisker
surface; basic study of fluid mechanics.
Research on human injury tolerance.