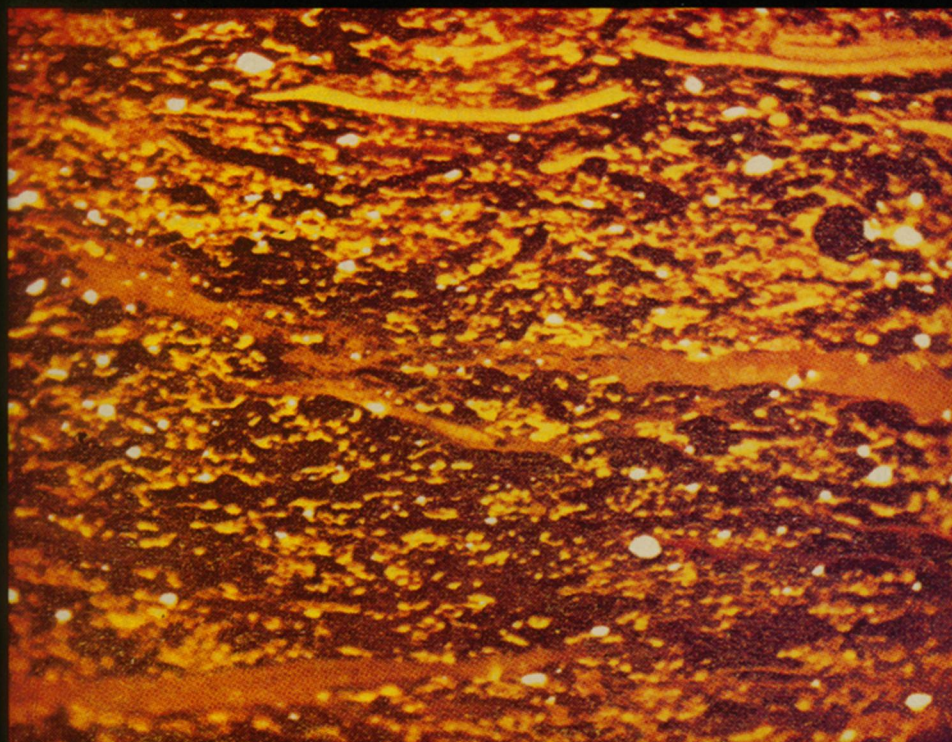


The Weekly Newsmagazine of Science

# SCIENCE NEWS

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**Colorful Coal**



MASTER THE "NEW ELECTRONICS" WITH MCGRAW-HILL'S

# Contemporary



**Now you can meet the challenges of today's incredibly rapid changes in electronics quickly and easily. This professional level electronics learning series is as innovative as the circuitry it explains and as fascinating as the experiments you build and explore!**

From digital logic to the latest 16-bit microprocessor, you master one subject at a time with McGraw-Hill Concept Modules sent to you one at a time, once a month, to make up the complete CONTEMPORARY ELECTRONICS SERIES. Each module of the fifteen in the Series is a unique blend of "hands-on" experience, interactive audio cassettes, and vividly illustrated printed support materials. Together they will prepare

you for tomorrow's better jobs or advancement in your present position by staying current with today's electronics revolution.

### **Understand Digital Logic... Microprocessors...Optoelectronics**

Here's an extraordinary opportunity to update your understanding of today's most important technological changes in electronics. You can start from scratch or use the Series to update yourself. You cover the latest integrated circuits, including TTL, CMOS, and ECL digital circuits; op-amps; phase-locked loops; microprocessors; and opto devices such as LEDs and LCDs.

### **Perform Electronic Experiments**

With your first module you'll use the latest digital integrated circuits to build an oscillator circuit that demonstrates digital signals — verified visually by the flash of light emitting diodes (LEDs) and audibly by tones produced through the mini-speaker that is provided.

You'll learn concepts applicable to all electronic circuits. With the first module, you will be able to identify the major passive components, like resistors, capacitors, inductors, diodes and transformers, and active

# Electronics Series

components such as transistors and integrated circuits.

Each Concept Module goes right to the heart of the matter. You waste no time on extraneous material or outdated history. It's a fast, efficient, and lively learning experience, a nontraditional approach to the most modern of subject matter.

## Construct and Use a Prototyping Design Laboratory

You will construct a professional Prototyping Design Laboratory which will be a valuable learning tool throughout your studies. Because of its versatility, you will use it again and again, even after you have completed your Contemporary Electronics Series.



*Expand To Rival Professional Instruments*  
After you have completed the Series and constructed your Prototyping Design Lab, an optional Expansion Kit is available which when added to your completed lab will make it a rival of professional instruments that are widely used in industrial laboratories for electronic design and development as well as testing and measuring.

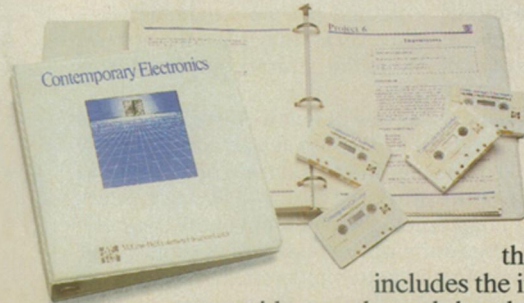
## Unique Interactive Instruction Makes Learning Easy

With each new module you'll receive a McGraw-Hill Action-Audio Cassette, a proven successful method of interactive instruction. Each tape creates a dynamic dialogue that not only quickly communicates the facts, but makes you feel that you're participating, as you respond to questions and listen to problems being solved.

Your ability to rapidly make this knowledge your own is further aided by a strikingly original technique for using diagrams, illustrations and schematics to

drive home points made as you listen to the cassette. Carefully indexed binder that contains

this material also includes the instructions to guide you through hands-on experiments. Finally, having completed the Series, you can



be awarded a Certificate of Achievement from McGraw-Hill upon passing an optional final examination.

## YOU COVER EVERY SUBJECT IN CONTEMPORARY ELECTRONICS

- Digital logic
- Digital gates (TTL, CMOS, ECL, NMOS)
- Flip flops
- Counters and Registers
- Op-amps and Applications
- Combinational logic circuits (ROMs, PLAs, decoders, etc.)
- Circuit analysis. LCR networks
- Transistors (bipolar and FETs), diodes and thyristors
- Integrated circuits (linear and digital)
- Oscillators
- Optoelectronics
- Microprocessors
- Voltage Regulation
- Advanced Digital Concepts

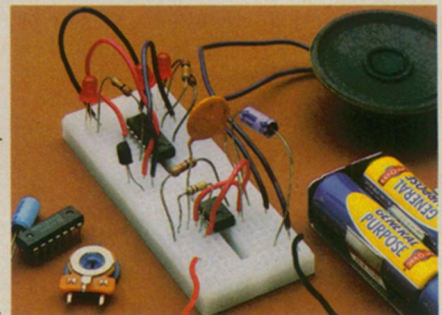
## Update Your Knowledge of the New Electronics

This program is for you whether you're a scientist who can use electronics to improve or speed up your investigations...a teacher who'd benefit from a refresher in contemporary components, circuits and applications...a manager or supervisor in an electronics related business or industry...an engineer in another field who finds electronics playing an ever more important role in your work...

someone looking to find new direction in this wide open field...or the kind of person who wants to understand what's going on in the world around you.

McGraw-Hill's Contemporary Electronics Series offers you the quickest and probably least expensive learning method available today, and the only one with "hands-on" experience. The only equipment you will need to complete the experiments in the Series is a multimeter, which is not included.

*The First Module Includes a Solderless Breadboarding System*  
It enables you to connect components and build electronic circuits easily and quickly. You'll use it throughout the Series to build and test your own contemporary circuits. Each module includes an essential hands-on experiment with real electronic components to give you a clear understanding of contemporary electronics.



## 15-Day Trial

To order your first module under our 15-day trial examination, simply complete the card and send today! If card is missing, write us for ordering information: McGraw-Hill CEC, 3939 Wisconsin Ave., Washington, DC 20016.

